

SIIDEF

Sewon International Industrial Design Fair 2022

An Exhibition Book



SIIDEF

Sewon International Industrial Design Fair 2022

An Exhibition Book



SIIDEF

Sewon International Industrial Design Fair 2022 An Exhibition Book

Authors

Endro Tri Susanto, M.Sn.

Dr. Rahmawan D. Prasetya, S.Sn., M.Si.

Drs. Baskoro Suryo Banindro, M.Sn.

Nor Jayadi, S.Sn., M.A.

Cover: Nandang Septian, M.Ds.

Layout: Dede Affian Surya, S.Ds., M.Sn.

Documentation: Silvya B. A. Candradewi, M.Ds. & Grace S. Pasaribu

Proofreading: Sekar Adita, S.Sn., M.Sn., & Patrisius Edi Prasetyo, S.T., M.Sc.

Editor: Sekartaji Suminto, M.Sn. & Baridah Mutmainah, S.Ds., M.Des.

Copyright © 2023

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Printed in Indonesia	05	04	03	02	01
Year	27	26	25	24	23

Aliansi Desainer Produk Industri Indonesia (ADPII)

Divisi Penerbit ADPII

Jl. Flores No.3, Citarum, Bandung Wetan, Kota Bandung, Jawa Barat 40115

ISBN 978-602-61467-6-2 (PDF)



CONTENT

- Content i
- Welcome Speech iv
- Intro ix
- Institut Seni Indonesia Yogyakarta, Indonesia 2
- Hochschule Hannover, Germany 46
- Silpakorn University, Thailand 50
- Universiti Teknologi MARA, Malaysia 58
- Universiti Sains Malaysia, Malaysia 72
- Adhi Tama Surabaya Institute of Technology, Indonesia 82
- Universitas Ciputra, Indonesia 86
- Institut Teknologi Telkom Purwokerto, Indonesia 90
- Universitas Prasetiya Mulya, Indonesia 96
- Telkom University, Indonesia 100
- University of Surabaya, Indonesia 106
- Duta Wacana Christian University, Indonesia 112
- Universitas Trisakti, Indonesia 118
- Seminar Summary 126

Assalamu'alaikum wr. wb,
Om Swastyastu,
Namo Buddhaya
Great wishes for all of us

Thank you to each and every one of you for being here today at this wonderful place. Before we get started, I like to express my honor to Mr. Prof. Dr. Agus Burhan, M. Hum as Rector of ISI Yogyakarta, Mr. Dr. Timbul Raharjo as Dean of Fakultas Seni Rupa ISI Yogyakarta, Mr. Endro Tri Susanto, M.Sn as Chief of Desain Produk ISI Yogyakarta, my beloved team and colleagues, also my dear students. I am very pleased to be able to welcome you all.

First of all, let us say praise to The Almighty God who gives thousands of favors to us until this day, we can implement events with festivities, full of a strong sense of community. During the few days, we would be about many different learning lessons, designs, and strategies through our special events, exhibition, and seminars, where we would be able to join in and get hands-on experiences. I hope these will help people grow and improve to be more creative and productive.

Welcome Spech

Chief of Event, Sekartaji Suminto, M.Sn.

SIIDEF or Sewon International Industrial Design Fair is a series of exhibition and seminar events in the field of industrial design in collaboration with several countries. This event is organized by the Industrial Design, Faculty of Visual Arts, Institut Seni Indonesia Yogyakarta, which had been held both online and offline in 2022. The theme of SIIDEF this year is CONTEMPORARY **DESIGN** IDENTITY: Optimistic yet realistic and contemporary problem solutions. There have been many problem's solutions that have been stuck during these past two years.

After the world has been shaken up by COVID-19, we can go back to thinking about the real issues of today's design.

Last but not least, I on behalf of the committee, would like to thank all the participants, both exhibition and seminar, and I hope we will continue this collaboration for the next events. Thank you.

Welcome Spech

Head of Department, Endro Tri Susanto, M.Sn.

Assalamu'alaikum wr. wb,
Om Swastyastu,
Namo Buddhaya,
Salam Kebajikan
Salam sejahtera bagi kita semua

Yang terhormat Bapak Rektor, ketua panitia, teman-teman dosen ISI Yogyakarta, para mahasiswa, dan semua pembaca. SIIDEF atau Sewon International Industrial Design Fair 2022 diikuti oleh para mahasiswa dan dosen dari berbagai universitas di Indonesia yang tergabung dalam forum prodi desain produk, dan universitas dari negara Thailand, Malaysia, dan Jerman yang telah ikut berpartisipasi.

Terima kasih telah mendukung dan berpartisipasi dalam acara SIIDEF. dapat Semoga kita mengambil inspirasi, manfaat serta ikut andil dalam membentuk contemporary design identity yang optimis dalam memecahkan berbagai permasalahan di masa kini dan masa mendatang. Harapan ke depannya SIIDEF dapat diikuti oleh lebih banyak universitas dari dalam maupun luar negeri, dan ikut serta memajukan industri kreatif Bantul, Yogyakarta, Sewon, *Indonesia*. Let us enjoy the event!

Assalamualaikum warahmatullahi wabarakatuh Salam sejahtera bagi kita semua Om Swastiastu Namo buddhaya Salam kebajikan Rahayu

hormati Rektor ISI Yang saya Yogyakarta, Bapak Agus Burhan, Kaprodi Desain Produk ISI Yogyakarta Bapak Endro Tri Sutanto, dan adikadik mahasiswa yang selalu saya banggakan. Saat ini berbagai persoalan lingkungan hidup, seperti perubahan iklim. hilangnya keanekaragam hayati, atau pencemaran ekosistem laut sudah kita rasakan langsung dalam kehidupan sehari-hari. Kita semua perlu menyadari bahwa semua tantangan tersebut adalah tanggung jawab kita bersama mengingat bahwa krisis lingkungan hidup telah melanda seluruh dunia. Dampak yang kuat upaya untuk menanggulanginya tidak bisa dilakukan dengan tindakantindakan reaktif saja, kita harus

melakukan langkah nyata untuk memetakan persoalan secara holistik dan berkolaborasi untuk melahirkan solusi konkret.

Dalam hal ini saya percaya bahwa semua orang dengan latar belakang masing-masing bisa memberikan dalam kontribusi besar upaya mengatasi krisis lingkungan hidup. Bukan hanya ilmuwan di bidang ilmu pengetahuan alam yang bertindak dan memberikan andil. Tetapi juga seniman penggerak budaya penulis desainer seperti adik-adik semua di ISI Yogyakarta. Dengan semakin majunya dunia industri kita punya tanggung jawab untuk merancang dan memproduksi desain produk yang tidak hanya berorientasi pada ekonomi, tetapi juga bersahabat dengan alam misalnya dengan memanfaatkan bahan-bahan mudah didaur ulang atau juga menyebarkan pesan-pesan tentang pentingnya menjaga alam di dalam desain produk yang kita buat.

Welcome Spech

Minister of Education, Culture, Research, and Technology of Indonesia, Nadiem Makarim, M.B.A.

Semua ini tentunya membutuhkan kemampuan berpikir kritis dan kreativitas yang tinggi. Seringkali kurang diperhatikan di dalam kelas karena penekanan hanya pada penguasaan teori dan konsep sehingga dibutuhkan keberanian untuk belajar di luar kampus dan mulai berkontribusi nyata pada lingkungan.

Saya yakin bahwa dengan membekali generasi hari ini dan generasi selanjutnya dengan cara berpikir kritis analitis serta diperkuat dengan karakter yang empati kita akan mempunyai solusi yang berkelanjutan dalam menciptakan gaya hidup berdampingan dengan alam. Selain itu, melalui pelaksanaan Sewon

International Industrial Design Fair ini saya berharap akan lahir ide-ide kreatif dan inovatif di bidang desain produk yang berdampak besar dalam upaya kita menanggulangi krisis alam.

Mari kita terus bergerak serentak memajukan dunia seni, melestarikan lingkungan, dan mewujudkan Merdeka Belajar. Terima kasih.

Wassalamualaikum warahmatullahi wabarakatuh Om Shanti Shanti Om Namo buddhaya

INTRO

Sewon International Industrial Design Fair 2022

CONTEMPORARY DESIGN IDENTITY

Optimistic yet realistic and contemporary problem solution

There have been many problems the solutions of which have been stuck during these past two years. After the world has been shaken up by Covid 19, we can go back to thinking about the real issues of today's design, such as:

- a. Carbon dioxide problems:carbon emissions from cities,cars and buildings
- b. Availability of clean water:urban hydrology and otherrelated aspects
- c. Cooling problems: we make global warming become even more real by turning on Air Conditioners (ACs)
- food issues: urban farming and the grow our own food movement will become more

- and more essential in the future
- e. Diversity problems: ethnic diversity which should exist in every company
- f. Availability of clean toilets: will greatly help reduce the mortality rate caused by diarrhea and cholera
- g. Technology issues: Smart City,Cyber City, and the huge investment made to Urban Tech

At this present time, designers are expected to contribute fresh ideas to the issues above, so that their works can give a positive impact. With more and more designers focusing on the above issues, what kind of impact will it create?

A designer is basically a problem solver, who creates a design based on the existing problems. Designers should always be optimistic about any progressive changes that are now underway, but also remain realistic. The belief that designers must cultivate is that they are able find contextual solutions to according to the times and technology, along with the problems that arise. Designers participate in finding current and future solutions. There are many approaches that can be applied by designers in resolving these issues. One of the options is contemporary design.

Contemporary Design basically does not focus on just one style but uses many identities (e.g. modernism, minimalism, art deco and other global styles). Contemporary design identity must continue to adapt and be adjusted to respond to current problems for the sake of future sustainability.

A designer who has a vision to solve problems regarding sustainability, is expected to have the sensitivity to design a product/design that produces positive outcomes.

Summary of Issues:

What kind of contemporary design does the world need right now?

How to apply the phrases of optimism and realistic into the design process according to the need to solve the problem?

Yogyakarta, Indonesia October <u>10th-22nd 2022</u>











We also provide the virtual exhibition by scanning this barcode. Please enjoy it!

Industrial/Product Design Department

Institut Seni Indonesia Yogyakarta Jl. Parangtritis Km. 6,5 Sewon, Bantul Yogyakarta 550011

Telp. (0274) 379133 | Email: despro@isi.ac.id

Web: despro.isi.ac.id | Instagram: despro.isiyk



Institut Seni Indonesia Yogyakarta

Indonesia





Departing from a small problem encountered daily as an Art/design student, where students seem to have difficulty carrying out their 3d assignments which are very sensitive when exposed to wind and other external touches. But there is no container or bag size that is spacious enough to accommodate it. Therefore, I took the initiative to create a bag design that can be extended if needed. By making it able to be extended and returned to its original size, users can use this bag for general daily activities.

By applying the student's specific problems, the idea of making bags that can be extended can also be used for other purposes that can be wider in scope, such as working in the delivery service field, or simply to add to the scope of the contents of the bag.



3D Elementary Design Assignment

Design Concept



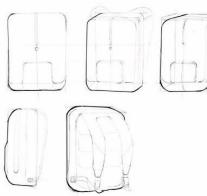
Reflecting on the food/goods delivery industry, which generally uses a box-shaped bag with a large size and fixed size, it provides a large space inside to store even sensitive items to be carried everywhere. However, the problem with this product is that it cannot be used for daily needs especially for students to carry on everyday duty due to its fixed size.

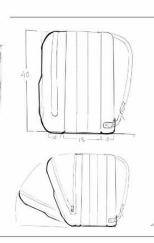
Therefore, a design is needed that can carry medium-sized goods but is wide enough so that the goods do not move anywhere when carried. In addition, the design needs to be timeless and not excessive in order to cover a wider and non-specific area of interest, as we understand through product standards that require simple but functional designs.

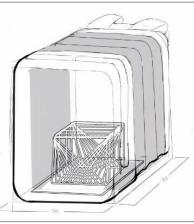
then how to make a bagt that can be elongated? By looking at and imitating the folds on the accordion, it gives an idea of how this bag works, namely by folding the extra part in the middle of the bag using the folds like in the accordion, it gives a neat result on the folds and doesn't fall apart. To maintain the size so that it does not limp, it is given an extension in the form of a thin iron in an additional layer of fabric and is also used as a base for placing things.



Design Process and Development









Final Design









Name University Email

Abimanyu Nurprasetyo Suryo BaskoroProduct Design, Institut Seni Indonesia

: baskoroislit@gmail.com

Armchair is a type of chair with additional hand support, a more relaxed concept and makes the user comfortable as if being hugged. Calporter gave the answer to that. A design that takes a modern minimalist style with rigid corners made of iron as a frame and elastic straps as a seat and backrest. Taking the silhouette of a throne and cobwebs, the calporter manages to become a chair that remains comfortable and ergonomic to use.

Design Concept

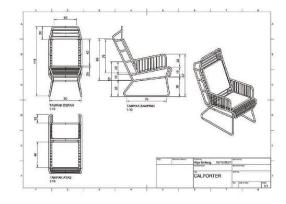


Departing from taking a spider web silhouette, Calporter evolved from a flexible form to take a rigid element as the end result. This concept is inspired by a product designer named Harry Bertoia, he uses iron netting as the main material. calporter itself is an absorption language from two French words, namely calmer which means calm and rapporter which means net.

Concept changes occur throughout the design process, through a consultation process and virtual application to produce the final design.

Design Process and Development

In its manufacture, Calporter, experienced many obstacles as well as changes in character and materials. This chair is a chair that can be called 'tricky' because of its rigid shape and fairly large dimensions. Calporter, through several consultations with professionals and builders, there must be an overhaul, such as the legs of the chair need to be lengthened to be balanced, the unification of the frame so that it doesn't need a lot of welding shots, the use of rope material as a base and backrest because the use of wiremesh gives an excess load.



Final Design











Name University Email : Alija Bintang Kautsar

: Indonesian Institute of Arts Yogyakarta

: bintangalija@gmail.com





One local tradition still keeps going, which is sitting on the floor. In Indonesia, Japan, and Korea, people like to sit on the floor to eat, drink, or study. Many people like to sit on the floor and bend their spine unconsciously. In Indonesian Islamic boarding schools, many students recite and memorize the Quran for hours while sitting on the floor.

Even sitting on a work chair for a long time would be tiring due to bending the spine. This will result in excessive stress on the back muscles and tend to increase the risk of damage to the surrounding tissue, especially when sitting in a bent position or leaning on one side of the body for a long time.

As a meditation that also sitting down, that can be more comfortable if we use a lower body support. People with scoliosis can be helped by using this type of chair. With a chair that supports the spine, users become healthier and hopefully more productive at work.





Design Concept





KUTUB stands fot "Kursi untuk Tulang Belakang" or Stool for Spine. Adopting the sheiza chair or kneeling chair design so that it sits on the knee making it easier for users to sit up straight without strenuous effort, automatically straightening the spine and forming a more healthy posture.

It use used and sustainable materials so that it does not add to waste but instead use waste as products that have selling value.

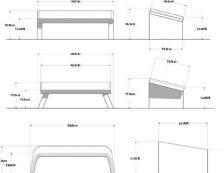


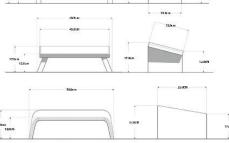
Design Process and Development

Initially, a prototype was made using used wooden containers made from pine wood. It was made into two types: standard type and foldable type.

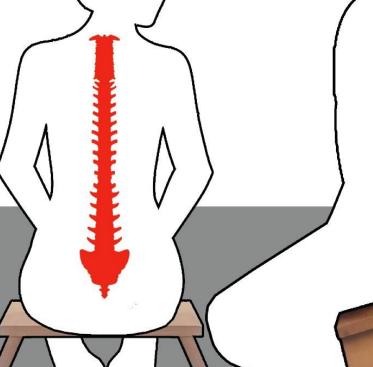
Both types have several disadvantages: heavy (so difficult to carry), the seat width is too small, tends to sag when used (because it is tilted then the surface is slippery).

This third design applies plywood and bamboo with a bending technique so that the next chair is lighter, simpler, and has a wider seat.











Name

Email

: Baridah Mutmainnah

Institut Seni Indonesia Yogyakarta University :

: baridah@isi.ac.id





R S E L I Z ® Wedang Telang

Problem Statement and Idea



Design Concept

Ancestors have widely pursued herbal drinks as health supplements Cultivating local plants that have efficacy is deliberately grown to be harvested and processed into healthy drinks for the body. However, preparing traditional drinks is not easy; before they can be drunk, it goes through the process of brewing concoctions. Previously through the preservation period, further back was the drying process which turned out to be not easy and required determination. Now the cultivation of plants as beverage ingredients in health supplement drinks marks the industrial boom in many places.



- How do we preserve healthy drinks in the past so they can be consumed practically and maintained in quality?

- What about choosing a suitable container for packaging herbal drinks for a long time?
- How to choose an eye-catching graphic design and provide support for the product it is packaged in?











Design Process and Development



4 1/2 "

6 1/2

Final Design



Processing and serving packaged drinks, which can be stored for a long time, requires the right decision when choosing the material to be used.

Moreover, this is a liquid object that will enter and be absorbed by the body, requiring a whole process: the process and the packaging technique when the brew is ready to be put into the container.



Name : Baskoro Banindro University : ISI Yogyakarta Email : baskoro@isi.ac.id







PT. D'LIZFOOD BOROBUDUR SEJAHTERA

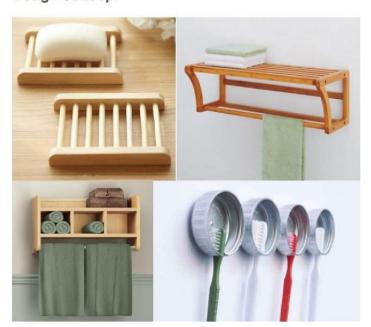
Food & beverage Produsen rempah herbal simplisia kering, bubuk, buah kering dan aneka racikan minuman tradisional.

Elisa Anggraeni

wa.me/c/6282136768587

This idea came from a problem with one of the bathrooms I've ever encountered. A semi-outdoor type bathroom that has a place to put soap, towels, and a toothbrush holder that goes together separated, gave me the idea to combine these objects into one easy-to-reach place.

Design Concept



Design Process and Development





Minimalis Natural

Minimalist concept andnatural makes an impressionconvenient and economicalroom.





Using color natural originfrom materials thatused

Final Design





: Erik Dwi Saputra

University: Institut Seni Indonesia Yogyakarta

Email erikds932@gmail.com



This is the mood board that I put together to be a concept designs that I make for my products.

sumber : Pinterest



Ribwood is a place to put toiletries with a minimalist design that is multifunctional. There are features such as a bar soap holder, a towel holder, and a toothbrush and toothpaste holder. There is an empty space above that can be used to put other objects.



There is a lot of market demand for dining chairs with ethnic nuances, locality as the nation's intellectual property, and Indonesian identity, especially Yogyakarta. Macrame is used for the development of regional cultural elements.

Design Concept

Local wisdom is used as the strength of locality and culture.

Design Process and Development

Dining chairs as eating and daily activities are developed into various kinds of woven ornaments, one of which is macrame.

Final Design





Name : Iridescent

University: Indonesian Institute of the Art, Yogyakarta

Email : ig; Iridescent.ac





NYENGKUYUNG HARDKORAN SERIES

Problem Statement and Idea

Wood is a material that is often used in the furniture industry. However, along with the times the wood material will run out due to the large number of uses. One of the used items that is recycled into furniture is used newspaper. Used newspapers are recycled into furniture because they have their own artistic value.

Design Concept

Upcycle used newspapers are included in the sustainable design movement. However, in some furniture creations, used newspapers are only used as a supporting material. Some of the creations have actually placed used newspapers as the main material, but used newspapers are less exposed and lack adequate strength. This time, the creation of used newspapers was carried out by conducting an experiment. The creation is expected to be able to become an alternative to new materials and to have its own character in the furniture and interior industries. Apart from that, the creation also contributes to environmental preservation and encourages people to recycle.

Design Process and Development









Final Design







Name : Dede Affian Surya, S.Ds., M.Sn.

University: Indonesian Institute of the Art, Yogyakarta

Email : dedeaffian@gmail.com



Many market opportunities exist for chair products with ethnic, aesthetic, and iconic nuances. It makes me look for different market segments and unique materials.

Design Concept

Up-cycling materials have been used as a source of creative inspiration.

Design Process and Development

Lazy chairs for relaxing and daily activities are explored into various chairs. In addition to prioritizing ergonomic elements, chairs must also prioritize aesthetic features so that the use of up-cycling materials becomes exciting. Because the nature of the material is rigid but flexible, he still uses the principle of ergonomic principles in its creation.

Final Design





ame : Nor jayadi, S.Sn, M.A Collaboration with CV. NAFARREL FURNITURE

University : Indonesian Institute of the Art, Yogyakarta

Email : norjayadi75@gmail.com

Even though the pandemic era is over, personal hygiene must still be maintained. Washing hands after doing activities should be a habit. The existence of clean water for washing hands is sometimes very difficult to find. Washbasins in public areas that are problematic and neglected are the cause of this problem.

This problem gave rise to a new idea to create a new sink design. To overcome the lack of a hand washing area, this sink is made portable so that it can be moved. The sink is powered by a step pump, in response to the unhygienic faucet lever problem.

Design Concept

The design itself is inspired by the shape of a wheeled trash can which can be moved easily. A push handle is then added for easier movement. This sink uses a manual pump system that utilizes the feet as an energy source.

Inside this sink, there are 3 water containers to store clean water and dirty water. This water container can be easily removed for cleaning purpose.





Wheeled Trash Can

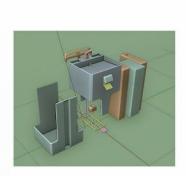
Foot Pump

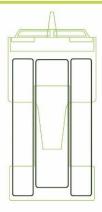
Design Process and Development

The design is realized using the Blender 3D application. To add to its functionality, an action picture is added to explain how the sink functions properly.

The main material to make this sink is Polypropylene, as this material is light-weight and flexible. Eye-cathing color can also be added to attract childrens to wash their hands.







Final Design









Name University Email

ersity: Permana Ahmad Syamputra
ersity: Institut Seni Indonesia Yogyakarta
il: permana.syam@gmail.com





CHABLE-SHELF Multifunction furniture for study

Problem Statement and Idea

Design Statement:

To create a furniture that supports studying activities in a limited room at home.

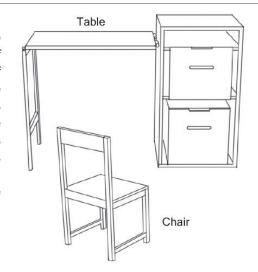
Design Feature:

This design combines three types of furniture into one piece.

The table can be folded and the chair can be put on a shelf, so that it can save more space when it's not in use.

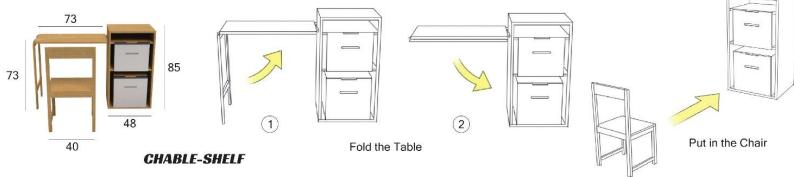
Design Concept

The concept of this "Chable-Shelf" furniture design is a combination of chair, table and shelf products combined into a single piece of furniture. So that when it's not used, it can save space from around 80x126 cm to 40x48 cm. It is designed with a minimalist style and prioritize practical function of the product. This product is portable so it can be moved easily. This product is targeting for students because the material will uses wood pallet waste so that the price will be affordable.





Design Process and Development







The "R" dining chair is a chair inspired by the complex letter "R", with an interesting but functional shape.

Design Concept

It takes a very unique theme letter "R", so this chair is made in such a way and say the used material, the used wood. Reprocess used materials considered general public is a used item that should be discarded, thereby helping to reduce waste and reduce production costs. This aesthetic has unique points on the handle of the chair which rarely designers apply to their designs, and this wooden material uses Borneo solid wood and heavy characteristic

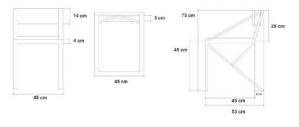
STYLE : Industrial

COLOR : Black & Wood Color

MATERIAL: Almunium Hollow & Recycle Wood

FINISHING: Doff spray paint & Varnish

Design Process and Development







Final Design







N U E

Name : Radya Riza Janarto
University : Institut Seni Indonesia
Email : Radyariza@gmail.com



The need to feel comfortable, easy, concise, and simple is one of the daily human wants and needs. One of the things that humans often come into contact with every day is furniture. Humans use furniture for various activities which sometimes make humans feel tired. The fatigue is not only due to daily activities, but also due to the absence of daily activities carried out during the Covid-19 pandemic. People feel sadness about the ongoing uncertainty. This makes people feel uncomfortable and safe.

retro-classic influence.

departing from the problems of the case above, this chair furniture responds to the situation currently being faced by the community in general, by considering the aspects of comfort and security desired by the community (ON Demand). Intended to help deal with the feeling of fatigue that is felt (ON Purpose) which is manifested by the creation of this chair as a response to these problems (Sit ON It).

Design Concept

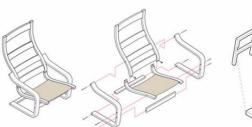


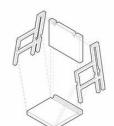
During the pandemic where people in general cannot do many activities, many of them only do activities at home. With the decreasing activity at home, people also feel uncomfortable because of the sad news due to the Covid-19 pandemic. The impact of this makes people become sentimental and want to remember the past more. The designs that emerged also had a

abandoned.

Seeing from the development of an increasingly advanced era, the design has also experienced developments, including in terms of the materials used. Nowadays the use of monotonous materials has begun to be

The use of mixed materials is a new trend to respond to the development of this era. So that the design of this chair uses wood, iron pipes, and foam material for the sofa. The construction of this chair using a knock down system between the sofa and the legs.



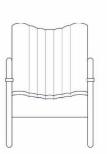


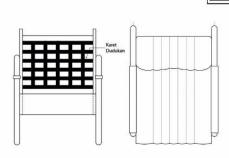
ØN CHAIR 81 x 63 x 90 CM

Design Process and Development









Final Design







Name University Email

: Mohammad Rafif Tori Pratama Product Design, Institut Seni Indonesia

rafiftorixviii@gmail.com



Small problems that exist in the household are always ignored, forgotten, and rarely responded to, but if they arise it will create a big problem. For example, the number of house cables that are stretched irregularly, forgetting to put keys, household appliances are not placed properly.

Make products so that these items can be placed in one place so they are not often forgotten.

Increase human awareness to pay more attention to the little things. Small things are often taken for granted but have an effect on big things.

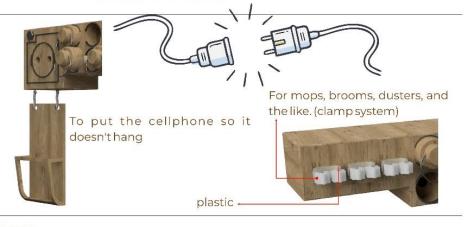
Design Concept

Multifunctional Hanger products, for key holders, various household appliances, even combined with flexible outlets. Inspired by the shape and working system of the outlet in general. Why? because the socket and plug into one unit. Using sustainable materials, namely waste. Combined with metal materials. Metal is used to adhere to a magnet because this product's system uses a magnet. To make it easier and more practical to use.

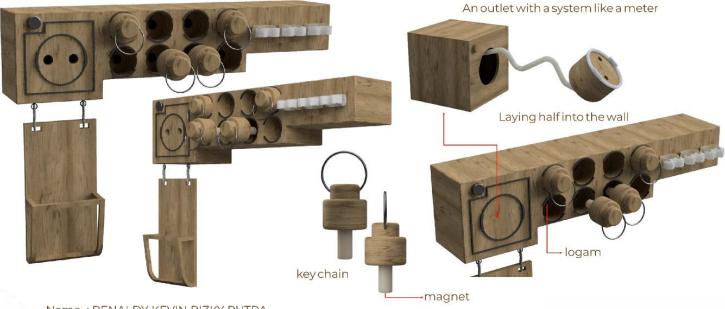


Design Process and Development

This Hanger product will be produced by hand made technique. By using teak wood waste material that is suitable and strong in this product design project. using natural finishing. Combined with magnetic techniques on plugs to make it more practical, effective and easier to use.



Final Design



Name: RENALDY KEVIN RIZKY PUTRA

University: INDONESIA INSTITUTE OF THE ARTS YOGYAKARTA

Email: kevinrenaldyrizky@gmail.com

Trees are one of the environmental assets and we can find them everywhere with various shapes and sizes as well as the colors of the resulting leaves that give the impression of calm, cool, warm, and comfortable.

The design idea is inspired by a tree that has 2 wooden branches and is realized in the form of a chair leg. The target product is used in contemporary apartments that are minimalist, simple, and have solid colors.

Design Concept

Concept

The design inspiration comes from the public space chairs in cafes, libraries and hotels. the design of the chair is made to look alive, calm, light and not tired when seen by the eye. Colors are selected using a pastel palette that gives a clam effect. help the user to sit in the correct position and not feel bored or make the user feel too comfortable and the occurrence of a changing sitting position which causes it to be a wrong sitting position

Dimension

The design of a seat that involves more of the comfort quality of the wearer and this chair also considers the ergonomics side as well as the dimensions applied with an overall height of 78.6 cm, overall width of 39.2 cm, the back of the chair that touches the top of the back, and an arm chair length of 30. ,5cm. This chair can accommodate most adults.

Design Process and Development







Name : SANTIKA FEBRI DWI CAHYANTI

University: PRODUCT DESIGN, INDONESIA INSTITUTE OF THE ARTS YOGYAKARTA

Email : tikafebry02@gmail.com



Design Concept



a return to nature concept, basically a kitchen spice taken from nature, and formed naturally

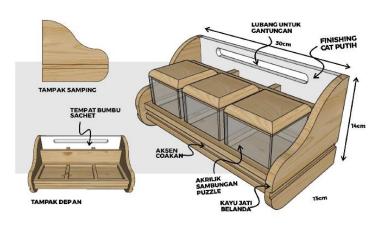
product ingredients also applied sustainably or made from natural.

pine wood texture blend natural and white color is a natural color that can give the impression of simplicity and clean

Design Process and Development

the process of designing a spice rack with pay attention to multifunctionality and aesthetics

The material used is pine wood and translucent acrylic glass. acrylic joints are made by technique puzzle to make the construction stronger.



Final Design







Name : Dhia Falaa Rafif Dewangga

University: Institut Seni Indonesia Yogyakarta

Email : rafif.dewangga@gmail.com

"Business owners in the field of shipping goods need tools that use upcycle materials, are sturdy, speed up and, are able to facilitate the use of gummed tape. Gummed tape is made with environmentally friendly virgin pulp paper, in line with the material on the easy handle gummed tape, it also uses upcycled teak wood from old building boards".



Design Concept



Gummed tape is a tape made of environmentally friendly virgin pulp paper with the addition of dry glue on the bottom layer which can be activated by water like a stamp system. This Gummed Tape handle roll is almost entirely made of old teak wood, upcycled from old building walls/boards. Currently, the way to use gummed tape is usually by using water or by using a simple dispenser.



This design is also a form implementation of the Sustainable Development Goals (SDGs). This Gummed Tape Handle Roll is inspired by combining the shape of a conventional duct tape handle with a working system using a paint roll facil tool tube. With this tool, it is not only environmentally friendly in terms of material but also as a tool that can facilitate business actors who need simple, compact, and fast packing tools.



Design Process and Developments



Gummed Tape has several different diameters and thicknesses. This is what ultimately becomes a consideration variable in determining the design. With the hope that it can match the concept and not only design the shape but also consider in terms of the working system of the tool. In this design, the size of gummed tape is widely used in the community, namely 11 cm in diameter and 2.5 cm thick.





Final Design



Email

Finally created a design that has a function like using conventional duct tape but in this tool using gummed tape, but can be done easily and quickly.

Roll n' Cut can be used easily because the component part of the refill container is easy to open and close

(the lid is on the side). Has an ergonomic shape and light weight (by design).



Name : Savira Dwirahmawati University

Indonesian Institute of the Arts, Yogyakarta

saviradrahmawati112@gmail.com



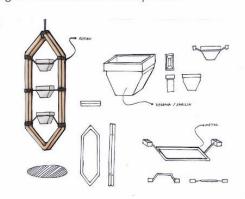
Waste getting more and more in this present, people consumptive habits and lack of awareness about nature and environtment being big problem for the earth. Many designers exploring the concept of sustainability to solve the earth problem, from the materials, post-production of product and also think the effect of their product.

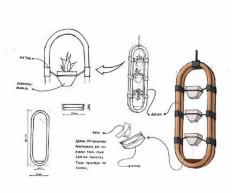
Design Concept

Sustainable design seek to reduce negative impact of the environtment. Teak wood waste are the waste of furniture productions that discarded a lot in my hometown, so to take advantage of that teak wood waste can be a materials of this design with unique accent because of joint between each teak and another and then added with accent from rattan webbing.

Scandinavia is the concept style of this planter, For Planter himself, of course the function is clear because its function is to grow a plant, but other than that planter is also the same as style scandinavia, namely paying attention to functions without ignoring aesthetics. For a planter in a workspace caffe, of course a planter has a function other than growing plants beside that, it also can beautify the place, give an aesthetic impression for visitors to see.

Design Process and Development







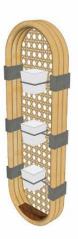


Final Design











Name : Bachrul Fiqih

Email

University: Indonesian Institute of The Arts Yogyakarta

bfiqih12@gmail.com

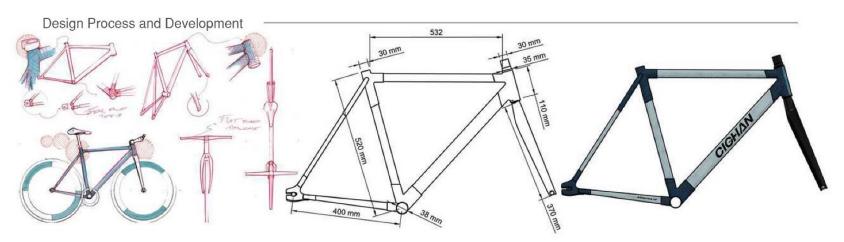
Solid denim bike is the design of a bike frame from upcycle used clothes and germen scraps. Solid denim material includes composite textile materials, the processing method is the same as carbon fiber bicycles. The background of the problem comes from the high interest of the public in the sport of cycling and wanting a bike with a light weight with a sporty and futuristic design

Frame solid denim bike starts the production process with the craftmanship method and cooperates with wood working workers, because the solid properties of this denim can be processed with wooden tools. In addition, bicycle technicians took part in the design and assembly.

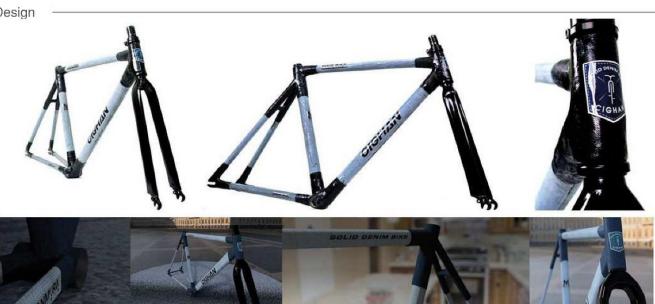
Design Concept

Making bicycle frames from processed used denim clothes and garment residues, adapts the process of making carbon fiber bicycles and bamboo bicycles. What distinguishes is the assembly process, solid denim bike uses a craftmanship process, starting from solid denim processing, frame incorporation to finishing. The production tools in this design are the same as wood working, making it easier to establish partner ships with start-ups who have resources in their fields.

Solid denim is a composite textile material, consisting of a combination of textile materials into new materials. The manufacture of solid denim material consists of, used denim type clothes, denim fabric leftover garments and special glue to turn denim into solid. The remaining production pieces can be reused into particle boards, so as to maximize the material so that it does not become new waste.









Name : Andika Muhammad Ramadhani

University: Indonesian Institute of The Arts Yogyakarta
Email: andika.muhammad1599@gmail.com





RE-RESIK

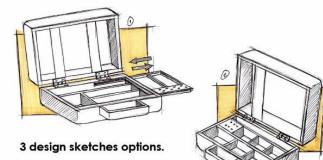
Minimalist Drawing Tools Container

Problem Statement and Idea

The problem and idea occur in how the users (designers and artists) organizes their drawing tools in a container that is easy to carry everywhere and can be used in their own workspace, yet with a minimalist design and simple operation.

Design Concept

Inspired by the geometry and the form of a suitcase, reducing the unimportant forms to maximize the function, and the volume of the container can be adjusted according to the user's needs in storing the drawing tools.



designed with a minimalist concept that maximize

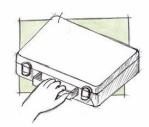
RE-RESIK designed with a minimalist concept that maximize the function; to help the users in organizing and storing their drawing tools such as paint brushes, rulers, paint tubes, small paint jars, etc. The main function is to make the user's working area to be neat and clean and making it easier for the users to bring drawing equipments everywhere. The users can just store them in one container and bring them everywhere they want.

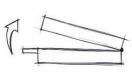
Design Process and Development

RE-RESIK made with clean, neat, and minimalist impression with the combination of dutch teak wood color with matte black finish.

Added paint brush stands, space to store drawing papers or sketch books, and detachable dividers that can be adjusted according to the user's needs.







Final Design









Name University Email

: Claudia Cintan Chrysantaputeri y : Institut Seni Indonesia Yogyakarta : claudiacintan@gmail.com







The fast growth of technology and product development needs to be balanced with preservation of nature and culture or local wisdom. As an indigenous of Indonesia, there is a responsibility to keep the culture alive, or even make improvements.

This product is not only made to provide comfort and warmth for the users. But also to assure them of sitting on it for a long period, especially for those who sweat easily on their back. The void area on the backrest is a perfect addition for those who feel discomfort due to sweat or heat in their back area.

Design Concept

As an armchair, Aruta tried to deliver the beauty of nature while also providing a warm and calm sensation like being at home every time when you sit on it. The experience of sitting on Aruta will be a memorable sensation that makes you relax. Every detail and ergonomics of Aruta is made to heal your fatigue and absorb every negativity from your body.

Aruta is made of natural materials, Rattan with Truntum pattern and Natural Cotton on Hemp Herringbone Fabric. Which are materials that you can find on a lot of traditional products. The design itself is heavily influenced by modern style, that uses little to no ornament and curve lines.



Design Process and Development











Final Design











Name University Email

: Dimitra Ihsandi Amru

: Indonesian Institute of the Arts Yogyakarta

: dimitraihsan@gmail.com



The idea of this design comes from motorcycle modifications often require replacing some spare parts. Unfortunately, modified spare parts on the market are often of lower quality than the standards of such motorcycle manufacturers. Therefore, it should be in making modifications, the quality of replacement spare parts is at least the same as the quality of standard spare parts produced by the manufacturer. Especially when it comes to important and crucial spare parts such as fuel tanks.

The emergence of the fuel tank with conventional materials custom motorcycle tank with conventional materials, namely iron plates, found many weaknesses including rust, a less effective production process in the sense that it could not pursue the details of product.

Based on the problem of iron plate material, the application of FWCP (FIBERGLASS WHITE CARBON POWDER) AS A MOTORCYCLE TANK MATERIAL) is designed with the main material White Carbon Powder, or often called White carbon black is a white silica powder made of silicon tetrachloride.

This carbon material is five times stronger than steel for structural components, also still five times lighter. Compared with aluminum, carbon is seven times stronger and twice as rigid, it is also 1.5 times lighter. Carbon has super-fatigue properties against all known metals, and when paired with the right resin, carbon is one of the most corrosion-resistant materials.

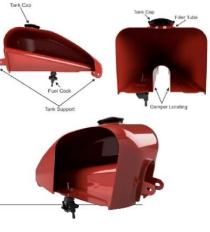
Design Concept

The three types of custom motorcycles that are most liked and chosen by users are the scrambler, café racer, and street fighter types. While the main considerations of users in determining the choice of their custom motorcycle tank are materials, trends, and design forms. Basically, the design of a motorcycle tank must pay attention to the ergonomic aspects of their custom.

Design Process and Development



This aspect will determine whether the user is comfortable when riding his motorcycle, because the location of the tank is right behind the steering handlebar and in front of the rider. The three main problems they face when using metal modified tanks are corrosion, dents, and leaks.









Scan to see the Droptest results of this product.



@dellachintyaa









Name : Della Chintya Ananda Filly

University : Pascasarjana Institut Seni Indonesia Yogyakarta

Email : dellachintya88@gmail.com



HYDROPONIC

Global warming caused by human activities in this technological era has resulted in aridity and drought in many places, especially in big cities which have scant green plants. As we know, green plants can absorb carbon dioxide levels, increase oxygen, lower temperatures with the shade and coolness of plants, and reduce noise. Therefore, in my opinion, everyone has a huge role in restoring the environment that we have damaged. One of them which maintaining hydroponic plants that are easy to do in our yard. However, often we don't have enough yard space, so it delays us from doing it, or it can only be done in small amounts. Therefore, the Joelene Hydroponic Pot can be the solution.

POT

Design Concept -

Joelene Hydroponic Pot is a pot designed for hydroponic plants that focus on materials, maximizing space, and product mechanisms. Joelene Hydroponic Pot use sustainable materials which wood waste as a product framework to prop the pot pipe and plastic waste shaped into pipes used as hydroponic plant pots, pipes for irrigated water, and water containers. The product framework is designed by taking up space in the vertical direction so that it can load a huge number of plants, and horizontally doesn't take up much space. The framework from waste wood is not solid wood but consists of pieces of wood that are left with a void in the middle and filled with pipes that drain water into the pot pipes.

Plastic Waste



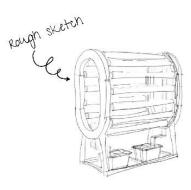
Plastic Waste

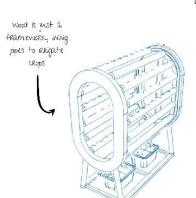


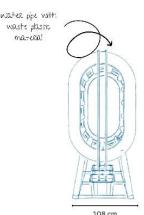
Waste Wood

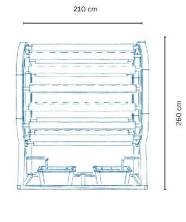


Design Process and Development









Final Design

















Name : Karennina Faaliha Gavra

University : Indonesian Institute of the Arts Yogyakarta

Email : karen.gavra@gmail.com



At this time, designers are expected to contribute fresh ideas to the issues that related to social issues. A designer who has a vision to solve problems regarding sustainability, is expected to have the sensitivity to design a product/design that produces positive outcomes.

Designers participate in finding current and future solutions. There are many approaches that can be applied by designers in resolving these issues. One of the options is contemporary design. Contemporary Design basically doesnt focus on just one style but uses many identities.

Contemporary design identity must continue to adapt and be adjusted to respond to current problems for the sake of future sustainability.

Design Concept



GUDDURAK is a clothes hanger rack created from the concept of sustainability. Inspired by the shape of the eggs storage which is then realized with a shape that suits the needs. Combined with a simple rack support leg design and a pursed shape at the









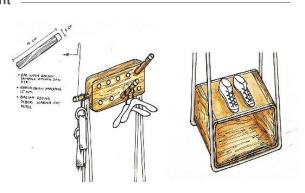




Design Process and Development

In the process of making this clothes rack or GUDDURAK product, it uses wood material with a natural finish combined with scrap iron material with a white paint finish.

At the top it is equipped with a movable stick with a function to put clothes, hats, hijabs, veils, and so on. at the bottom there is a box that functions as a place to put shoes.



Final Design











Name University : Linda Triyuana

Email

: Institut Seni Indonesia Yogyakarta

: ltriyuana@gmail.com

your sleeping best friend

1st WINNER ID Speaker Design International Competition

Problem Statement and Idea

cases of difficulty sleeping and the level of sleep quality are still relatively low, especially in urban areas and workers who have a busy time, in urban areas workers usually have very busy working hours or activities so that the quality of rest or sleep cannot be maintained, from this main problem it makes an idea in the creation of product designs to help the intended target market to achieve an adequate level of quality sleep.

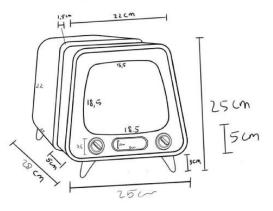
Design Concept

From the problem statement, the idea of designing an audio player product that has features that support and improve sleep quality such as a night light, special audio arranged to help sleep, Bluetooth available to send songs as desired by consumers, available alarms, and other features, by using the concept of an eye-catching design style that is different from other audio players on the market

Design Process and Development









Final Design













Name : Dhio Dwiki Nanda Putra

University : Indonesian Institute of Art Yogyakarta

Email : dhio.dwiki@gmail.com

"the other way around"

PROBLEM STATEMENT AND IDEA

Yogyakarta City is one of the places in Indonesia where Bakpia, a green bean-based dish, is widespread. Bakpia manufacturing in Yogyakarta is relatively large since this meal has become a distinguishing feature of easily obtained souvenirs. Problems with waste generation have been discovered due to the high production statistics. Green bean shells, a critical raw ingredient, are one of the leftovers from the Bakpia manufacturing process. One solution to the issue of green bean shell waste is to treat it, one of which is to manufacture a bio leather sheet.

Bio leather sheets are made using environmentally friendly natural mixes. As a result of the processing stage and several trials, material qualities that are strong, flexible, and flexible as befitting the character of the animal or synthetic skin materials are created, as well as a texture that retains the essence of the green bean shell material. A sewing method is used to produce a product, often used in fabricating leather items. Fashion accessories, particularly organic items, are an alternative in the creation of products based on bio-leather waste green bean shells because they have a character that mimics leather and have a relatively quick market share turnover.



DESIGN CONCEPT



In designing this product, what must be maintained is the character of green bean shell waste so that users get a direct experience when touching the product. In material processing, the main target is to process waste with organic mixtures that still have a rough texture like the initial character but are also flexible. The product that will be designed is also shaped into a box but has curved corners that will be applied using sewing techniques.

In addition, to give the characteristics of Indonesian culture to the product, lurik cloth with a telu-pat pattern was chosen as an ornament in the product made.



"Lurik Telu Pat Pattern"

The telu-pat pattern of the Javanese telu (three) and Papat (four) is a seven-lane design composed of one group unit with four lanes and the other with three lanes. The number seven is holy in Javanese culture representing life and wealth.



DESIGN PROCESS AND DEVELOPMENT

Material processing research





Material Testing



Water-Degradation Test

Production

Sketch









Soil Decomposition Test

FINAL DESIGN





Sekar Adita, S.Sn., M.Sn. / Silvya Bintang Ayu C., S.Ds., M.Ds. INDONESIAN INSTITUTE OF THE ARTS YOGYAKARTA sekaradita@isi.ac.id / silvyabintang@isi.ac.id



" Design must have meaning for us. Shape, color, and choice of materials should all complement each specific plan. A good strategy is functional, appealing, and simple to understand."

PROBLEM STATEMENT AND IDEA



Goat skin, also known as Moroccan skin, is famous for its lightness, flexibility, and strength. Since the skin is mainly made of dense weaves of small-diameter fibers scattered by several elastic fibers, it is one of the most potent skins. This leather structure gives the skin a characteristic tight rough feel with a ridge that imitates a stone. The characteristics inherent in goat skin make it very soft, supple, and waterproof. This is primarily due to lanolin, a wax oil produced by goatskin.

Seeing the potential possessed by this material and the high amount of goat meat consumption in Indonesia, the use of goat skin is felt to be entirely appropriate in its application in furniture products.

Lounge chairs were chosen as a product because this type of chair is in demand by many consumers as the main focal point in the room, which is not easy to spoil the existing theme concept.

The choice of teak wood material as the main structure in this chair's design is very well known for its durable strength, even without any influence on weather, such as being resistant to heat and rain. This is one of the reasons teak wood is the most favorite material, especially in the furniture industry.

DESIGN CONCEPT





Shakers meet Scandinavian style. This idea originated from both sides of the Atlantic. It combines elements of medieval architecture and a minimalist style, like the Design of Archi by Henrik Pedersen, which cleverly combines two natural materials. In this lounge chair design, the selection of goatskin and teak wood materials aims to create furniture that looks great in a modern and traditional setting.

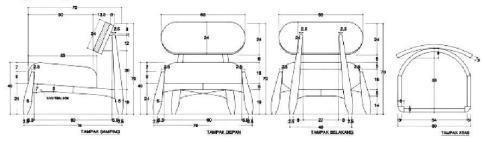
The demand for personal space and time, the freedom to be oneself, increases as the speed of life quickens and complexity increases. The concept centered on utilizing the finest materials and craftsmanship to create an ambiance that lasts for generations. This layout was conceived to provide aesthetic satisfaction across the room's many memorable

DESIGN PROCESS AND DEVELOPMENT

Sketch



Working drawings



FINAL DESIGN









Dr. Rahmawan D. Prasetya, M.Si./ Sekar Adita, S.Sn., M.Sn. INDONESIAN INSTITUTE OF THE ARTS YOGYAKARTA rahmawan@isi.ac.id / sekaradita@isi.ac.id



Children aged 5-6 years who are affected by the Covid-19 pandemic and require to study online at home. Even so, the study table facilities are still lacking due to a significant changing habits. Some parents still generalize that studying anywhere (suc as on the floor, dinning table, etc) are the same and not effect their children studying habits.

The purpose and the idea is children (5-6 years) can get used to studying at a real set of study tables. Children at the age of golden age are active and have high curiousity, so studying at the right set of study tables can build good habits and enthusiasm for them.

Beside that, a lot of plastic waste who not proceed properly or maybe not proceed at all make a new problem with our environment.

Design of a set of study table use two materials, recycled plastic waste (HDPE) and pinewood. This study table uses several system such as knock-down, fold, and compact. Target market for this study table is children aged 5-6 years (golden age) with colorful style (recycled plastic who has attractive color for children) and insects theme.

The use of knock-down and folding system aims to make children active in assembling their own study table (under parental supervision). During the golden age (0-8 years), children have a high curiosity. Morerover, the purpose of compact system is to facilitate storage (well organized).

Design Process and Development



Final Design





Name University Email

: Miranti Yasminingrum Susanto : Institut Seni Indonesia Yogyakarta : yasminsusanto@gmail.com



One of my husband and i like to do if we have spare time is taking care of our plants. We used to do hydroponics with the Wick system, the system is the cheapest among others, but it turns out that Wick system isn't effective,

because it helps plants grow faster and healthier. But, N.F.T costs more money, either for electricity, treatment, and design. The same function with the wick system is, we also could maintain the plants from the root.

but we still could maintain the root. Doing it by N.F.T (Nutrient Film Technique) system is even more effective for beginners,

So how to resolve this? How to find a way to have almost the same reaction as the N.F.T system?.

Design Concept

- Could leave the pot hanging, or put it on somewhere flat
- Must be transparent, so we can maintain the plants from deep down.
- Making two concepts. 1 for big plants, 1 for seeding pot, and attachment sets.
- Material: Resin, Re-use Rubber, rustic metal.

Turns out i can't find a way with the hydroponic system. But the soil based planting system could be an answer. To resolve this i was thinking about a transparent pot.

So as the plant grows, we can see the roots throughout its long process. Not just the roots, the soil based planting system has many problems in the soil, we can see how the soil would be. It could be molded, had fungus, and other bugs as the pest.

We could really take a look at how the water is needed for the plant, and if we put worms to help the plant grow.

And voilá, we can maintain the plants even before affecting the leaves or fruits.



Design Process and Development

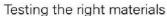


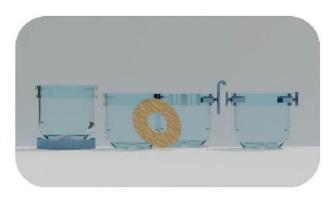
This process is for making sure. if the materials i choose was right. So. i can continue to make 3D modelling



Had to built all the stes for 12 hours

Making 3d Modelling





Final Design



The Final design has, 5 pots, and 4 attachment. Theres, Pot stand, for reducing stains on flat surface. Filter, is for seeding process. Seeding is the most vulnerable process on plants, so its need water rain filter, for not making direct contact when raining. Wall holder, is for attach the pot onto the wall.

Pot Hanger, is for hang the pot on the ceiling.



University

: Dinda Marsyella Maydi

: Institut Seni Indonesia Yogyakarta Email

: dindamarsyella92@gmail.com



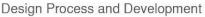
With the spread of patients due to COVID-19, the need for competent medical personnel are urgently needed as health workers on the front lines. Unfortunately in many countries today is not a shortage of medical personnel but ironically tends to be lacking the vital medical facilities needed. The facility is in the form of personal protective equipment (PPE) which is used as the first protection against patients infected with the virus. One of the most important pieces of protective equipment is a mask, because the mask will protect the organs on the face that are always exposed to the environment directly. The lack of adequate facilities will certainly affect the performance of medical personnel. Much medical personnel complained of being very tight and even injured in the face due to continuing to use masks.

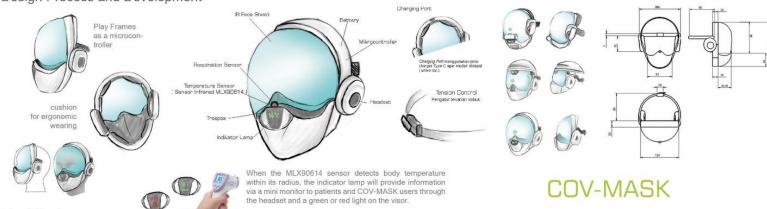
Design Concept

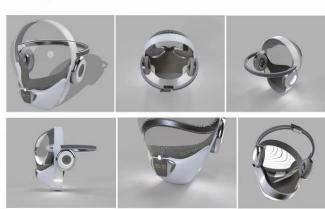
COV-MASK is a multifunctional tool that is expected to be able to overcome all the problems faced when using masks for medical personnel before. Shortness of breath, difficulty communicating, facial injury, inadequate face shield. All these problems will be solved by this tool because we try to combine censored masks and face shields in innovation, using infrared sensors to detect the temperature of the person being faced, indicator lights as a result of temperature detection, sound transmitters as communication tools between medical personnel applying the principle of radio waves (wireless), speakers make it easier for the medical team to communicate with patients, soft pads inside make users feel comfortable, there is a CO2 to O2 converter so that it can overcome the problem of shortness of breath.



This product is equipped with a total face shield, an Arduino microcontroller as a central system for controlling features, Treepex as an air filter and respiration, and temperature sensors to detect COVID-19 patients or victims automatically.











Final Design

Name : Deny Muhammad Priyambodo University : Institut Seni Indonesia Yogyakarta Email : denymuhammadp7@gmail.com

MiBoo is an acronym for Miswak and Bamboo, which is an environmentally friendly toothbrush product. This product is made on the basis of concern from designers where designers find it difficult to find an environmentally friendly but travel friendly toothbrush product. The environmentally friendly toothbrush products on the market today are only products with common shapes and functions. Therefore, designers want to add a touch of other features that can increase the interest of users to switch to environmentally friendly toothbrushes. This product is also in accordance with the 4th principle in Sustainable Design, namely, the Recycling Principle. This product uses environmentally friendly materials that can be recycled and also does not damage the environment. In addition, the material used is also fast growing material (Bamboo)

Design Concept

MiBoo brush was made from Miswak that are one of the natural material believed to be able to maintain oral health. The stick was made from bamboo. It is sustainable and also strong enough to be made into a stick. Not to mention their texture is aesthetics enough. The product will have waterproof finishing since it will be put in the bathroom and have a big amount of contact with water. It's travel friendly, user can rotate the brush to store in its place.

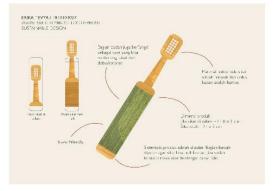






Design Process and Development





Final Design





3D Collaboration with Ailsa Bitha Nalaarni



Name : Erika Tevya

University: Institut Seni Indonesia Yogyakarta Email: designbyerikaa@gmail.com

As one of the Indonesian intangible heritage, it is important to preserve the existing and relearn the extinct motifs and techniques of Toraja weaving. while improving the weavers' welfare by giving higher respect and value to their artistic skills.

Saemo chair is designed for someone socially unconventional and often involved in the arts. This chair is suitable to be placed in the living room, workspace, lounge, or bedroom.

Saemo in Toraja means "come". This chair has the meaning of inviting people to use this chair.

Design Concept^A



TRADITIONA ETHNIC THEME

The design it's a timeless style taking cues from the 18th and 19th centuries, incorporating classic art, antiques, and pieces with history.

Textiles Toraja accents can help pop a room. Rich earth tones are used in this chair, the dark varnish of wood. The cushion is pale and soft and tends to be welcoming and not jarring.



memorable layers and elements you can't miss or forget for its uniqueness. A good interior design option for a rich and heady space full of visual interest and a relaxed spirit.



Wood frame with cotton thread and ethnic pattern cushion

FINNISHING

interlacing cotton thread and varnish on wood



Tenun Toraja

Design Process and Development



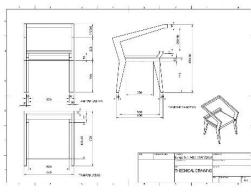
Reference











Final Design 🔥



















Name : Bunga Suci Adita

University: Indonesia Institute of The Arts Email : bungaadita@gmail.com





Mount Merapi is one of the most active stratovolcano in the world. The cone-shaped volcano with a summit of approximately 2910 meters has erupted several times. Merapi erupted sand and rocks. It is a blessing for the rock and sand mining community, whose impact is an economic life that benefits them. Many people used the rocks released when Merapi erupted into several products or items such as grinders, candle holders, etc.

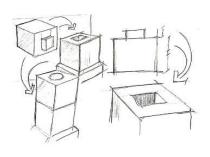
Design Concept

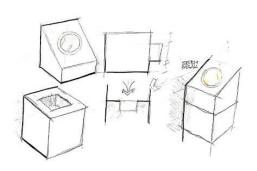
The erupted rocks are still classified as trivial, but their shape and structure are fascinating. With the characteristic that small hollows are different from dense river rocks. When combined with river rock with thick pores, it becomes thrilling.

The weight becomes a hindrance when carried by. The Puzzle Rocks tries to provide alternative solutions by combining the parts to become a whole product.



Design Process and Development





Final Design











Name : Endro Tri Susanto, M.Sn. & Nandang Septian, M.Ds.

University: ISI Yogyakarta

Email : endrotrisusanto@gmail.com - nandangseptian@isi.ac.id





FROGGY PLANTER

towards self greening

Problem Statement and Idea

Froggy planters are the context for the widespread use of plastic pots in the community. Plastic pots have a negative impact on the environment when they are demaged and not reused. Discarded plastic pots cannot be decomposed by soil.

Froggy planters are designed to use environmentally friendly materials in the from of bamboo and white concrete, which are sustainable and do not have a negative impact on the environment.

Design Concept -

Froggy planters is and indoor planter that will inspire everyone to do greenery inside. Users can experience the sensation of planting plants at any time and from any location, allowing them to create their own personalgreen room. The froggy planter is also designed using environmentally friendly materials, so that the eco-lifestyle movement can be realized on a small, individual scale.

The four supporting legs of thr froggy planter, which takes its name from frog's powerful legs, make the white concrete material appear taller and keep the plants the primary attraction. in the hopes that the plants [lanted on the froggy planter will flourish and endure, frogs are picked with the philosophical components of creatures that can resist a wide range of climates.

Design Process and Development





Email

Name : Muhammad Mahrus Andrian

University: Indonesia Intitute of The ArtsYogyakarta

: mahrus.andrian3@gmail.com

Natural materials such as wood and bamboo are renewable and biodegradable types of materials. However, uncontrolled exploitation of natural materials to meet human needs can also damage nature itself. On the other hand, the natural materials used to make a product are not hundred percent used. Like bamboo in this case. Many bamboos are used as supporting materials in the process of making houses or buildings. After the building is finished, the bamboo is no longer have function.

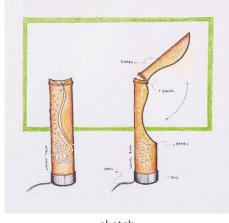
From this problem, there is an idea to use these bamboos as material to make a desk lamp. Of course, in addition to helping reduce the problem of environmental damage, it also has high artistic and economic value.

Design Concept

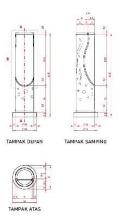
The idea is how to make desk lamp with more than one function for the placement in the bedroom. This desk lamp have main function as reading lamp with a moving top arm. Using the main material of bamboo and coconut

wood as the holder. There are holes on the stand side so that the light that comes out has beautiful patterns when used as a sleep lamp. Combined with LED technology which is more efficient and environmentally friendly.

Design Process and Development



sketch



technical drawing



3d models

Final Design





reading-mode



sleeping-mode



: Isnan Hanifi Name

: Institut Seni Indonesia Yogyakarta University : hanifi1998isnan@gmail.com Email

In this era, the impacts of climate change are getting worse. Therefore we need addaptation to our environment. Naja stands for Natural and Window (invites out thinking more broadly).

That's a homedecor partition design with the theme of climate change mitigation with natural materials as a media to tell.

Design Concept



Leaf pattern from ecoprint The tip of the plant that grows upwards symbolizes good fortune not always above, sometimes also down.



Woven water hyacinth That resembles seeds New beginning. Change that cares more about nature



Black and white woven bamboo Means, in utilizing nature we must balance it as well so it doesn't become chaotic. Don't be selfish

Design Process and Development



Shape Idea as tampah (indonesian stuuff to clean the rice)



Leaf pattern from ecoprint,

The leaf motif is made from ecoprint
with hammering technique,
and finished using tawas.



Woven water hyacinth seed-shaped circular woven seed



Black and white woven bamboo. woven bamboo 2 colors made like a winnow

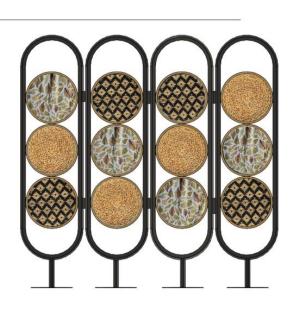
Final Design

Designed with compact and thematic, this partition has a unique touch based on the story telling and mix material used.



Email







Name : PUTRI LARASSATI

University: INSTITUTE OF ARTS INDONESIA YOGYAKARTA

: putrilarassati708@gmail.com

Tilapia (Oreochromis Niloticus) is a type of freshwater fish originating from Africa that has been widely cultivated in Indonesia. Tilapia skin only has been used as an ingredient for making crackers, bags, and wallets.

An effort to increase the added value of the fish skin is to turn it into another product design for daily activities, one of which is designing sneakers.





: Salvinia Virgita Prihastuti Name

University : Indonesian Institut of Art Yogyakarta

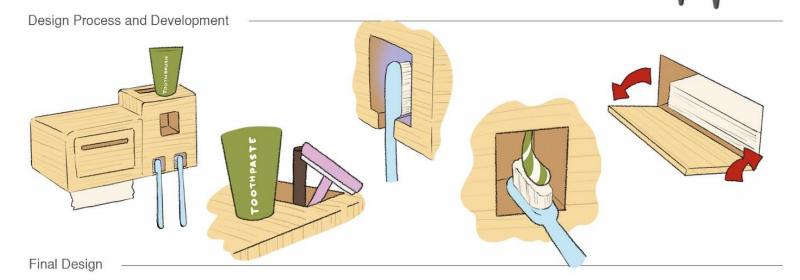
Email : salvinia40@gmail.com

Taken from a problem of cleanliness of toilet facilities, the use of toothbrushes commonly can become a breeding ground for fungal and bacterial growth from oral bacteria. So this toothbrush holder is designed to solve this problem, with a sensor and UV light to disinfect the bacteria on the toothbrush. This design is also multifunctional, providing an auto sensor for the toothpaste and a tissue storage as well as mini toiletries storage.

Design Concept

Protec-to Holder is a toothbrush holder purposely designed in eco-design, which is using sustainable material 'bamboo lamination'. Designer also applied minimalistic style to keep it looks clean and stay natural. This product is using UV light in the toothbrush holder as the main function and purpose to kill the bacteria and fungus around the brush. There is also an auto sensor for toothpaste to prevent direct touch of using the toothpaste and to make teeth brushing activity become more easier. Not only that, Protec-to Holder is also providing a storage specificly for tissue and toiletries.

"Clean toothbrush, clean oral, stay healthy"











Name : Yerika

Email

University: Institute of Arts Yogyakarta Indonesia

: yerikacindy.yc@gmail.com

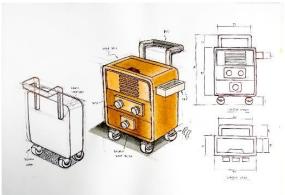
- For Tool Boxes with a shelf-like design, the compartment does not have a divider for utensil placement.
- Has an open form, and can not store the tool as a whole, because it does not have more space.
- The door in the compartment must use a latch to prevent it from falling (closing again)
- Design Tool Box has a compartment with a special bulkhead.
- The tool box is closed using wood, each drawer has a full extension rail.
- By having wheels, can move universally and have brakes.
- Using straight spoon door hinges to prevent the door on the compartment from falling (closing back)

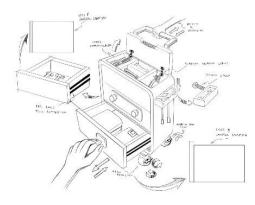
Design Concept -

- A Tool Box as a motorcycle workshop toolbox, made of teak wood with a blend of iron material as a complementary accent in the style that is carried, which is contemporary.
- RUMIT Tool Box is inspired by the shape of a retrosound with a combination of suitcases equipped with 4 wheels as support and equipped with protective brakes.
- The use and placement of the tool box is designed to have drawers and compartments to make it easier for users to store tools, so that tools are not messy and security is maintained.
- The shape is closed, and there are two drawers with full extension rails in each drawer.
- Tool box dimensions 50 cm x 40 cm x 27 cm.
- The material uses a combination of wood with dark colors such as teak, combined with iron.

Design Process and Development







Final Design











Name : Wanda

University: Institut Seni Indonesia Yogyakarta Email: wandasaja02@gmail.com







This product started from a question, 'How if I combine traditional accent and skandinavian furniture style into a trash bin?'. And here it is, enkel, a trash bin with an ashtray on the top of it.

Design Concept -

Enkel is a trash bin equipped with a drawer-style ashtray on the top. The word 'enkel' is taken from the Swedish language which means 'simple'. In the mention of word enkel in Indonesia, it can also sounds like the word 'engkel' which is identical to the foot in Indonesian.

Enkel also includes rattan webbing as a translation of the traditional elements in this product concept, the webbing is side placed of the trash bin as a point of product attraction. This product also has many curves at the corners to add the natural and elegant impression.

As the origin of the name, enkel carries a Scandinavian style. A mix of solid colors and rattan webbing accents for natural elements is applied to the product. As the name implies, this product has a characteristic that is a trash bin that has legs as a support feature



Design Process and Development





The design of this product starts with a full metal trash bin and ends with a wooden execution

Final Design



How To Operate?



pull the hook to open the front door

release the main bin

drawer ashtray



Name University: Email

: Yonathan Yosi Tara

Institut Seni Indonesia Yogyakarta

ytara45@gmail.com







Metal Wheel-SpurGear

Problem Statement and Idea

A work desk is a place for employees' routine activities in doing work. Desk decoration is an essential part of the work desk area because it can reduce the stress level of its users. Metal Wheel-SpurGear is a work table decoration product that can be rotated with fingers with different levels of torque and has a pleasing effect on reducing stress levels when tired in mind at work.

Design Concept

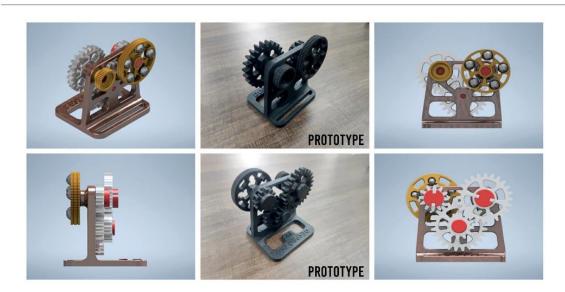
The product frame material uses hardwood material to create a classic impression. The spur gear material uses aluminum material to make it lightweight and strengthen the metal appearance. In contrast, the wheel uses brass as a ballast material, creating an elegant and luxurious impression. In contrast, the axle material uses stainless steel, and the parts ballast uses black glass marbles.



Design Process and Development

The design and development process of Metal Wheel-SpurGear product is carried out by designing 4 different levels of turning torque which can be rotated with the user's finger to produce different satisfaction effects. 4 levels of torque are produced by the combination of 4 straight-gear components and 2 turning wheels in 3 axles. Axle 1 connects the large dial with the first 12-edged gear, which is directly connected to the 24-edged gear on axle 2 and is still in alignment with the second 12-edged gear, then the second 12-edged gear is connected to the second 24-edged gear on axle 3 and axle with a small turning wheel.

Final Design





Name : Patrisius Edi Prasetyo, S.T., M.Sc. University: Indonesian Institute of Art. Yogyakarta

Email : Patris@isi.ac.id



Design Concept

The colors chosen are blue, reddish and purplish, symbolizing the collaboration of primary colors (blue and red) into purple, the union of warm tone (red) and cold tone (blue) colors becoming a shaded color (purple), with white as a binder, intended to be a harmonious core.

The Tie-dye technique is a binding and coloring technique, talking about how our elements are tied to each other, humans and nature, binding and coloring each other so that it produces a colorful tone, full of experience, full of waves. Natural dyes, secang, and Indigofera were chosen because these works are based on the eco-design concept. Trying to minimize waste and synthetic materials that can pollute and damage nature.

Sun Sea and Sand depict a bright, happy and full of waves, ups and downs like this life. Sun Sea and Sand also symbolize the three elements which we knew as the trinity, namely the upper world (sun), the underworld (sea) and the middle world (sand), fire, water and earth which are the sources of human life, symbols of nature that must be preserved for its continuity. Air in this case is the complement, the power in the human element, which is symbolized by the human itself, the models who wear these clothes, are responsible for carrying out the continuity of the trinity.

Final Design

Casual and semi-formal styles are the topics of these works. 9 shirts made of cotton and semi-silk are processed into daily wear outfits, or clothes that can be worn anytime, according to the occaand atmosphere. These clothes are ready-to-wear clothes that can be worn by anyone (men, women, old, young, according to their size). The design is designed with simple but full of creativity, through several experiments here and there, trial and error, created clothes that are ready to wear and have a selling value.

Design













Name University : R. A Sekartaji Suminto, M. Sn

: ISI Yogyakarta Email : sekar@isi.ac.id





Hochschule Hannover

Germany









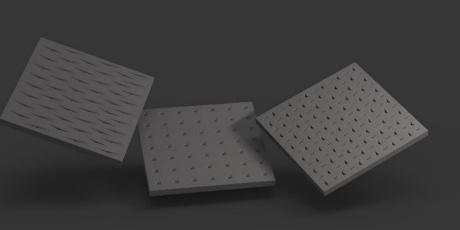
Every day more and more impervious surfaces are "sealing" the ground in Germany. Since the climate is changing we have to expect harder and more frequent rainfalls, which subsequently cause floods and damage to the German landscape and building infrastructure. When water cannot drain into the ground, it causes many problems; ecologically the groundwater is not renewed and microorganisms in the soil cannot survive. On the other hand, residents have to pay for every liter that doesn't seep into the ground. It is important to drain as much water as possible.



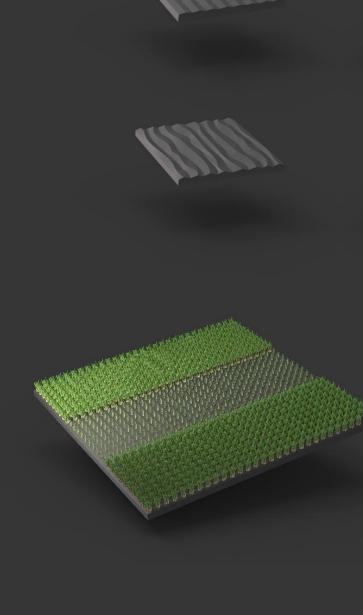
By using cobblestones, there are multiple ways to let water drain into the ground. Here we chose to use a special cement with a cobblestone aggregate. The drainable concrete is open-pored, so water can pass through without allowing plants to grow in any gaps.

Because of the notches in the cobblestones, water will be directed to drainable spots.

The density of the concrete prevents water from draining as quickly, however, the ruggedness of the stones guarantees grip while walking or driving.



Another way to drain the water is to drill holes in the stones and let plants grow through, which is a more common solution. In this project, we chose to not fill the holes with cement and leave very small gaps in close proximity. One side of the stone has bigger openings than the other, so the resident can choose if they want more or less vegetation. With this design, it is possible to both take advantage of an efficient cobblestone aggregate and have a nice-looking lawn









Jochen Beckmann jochen.beckmann@stud.hs-hannover.de Hochschule Hannover, Gemany



Eric Bertram eric.bertram@stud.hs-hannover.de Hochschule Hannover, Germany



Silpakorn University

Thailand

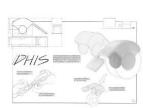


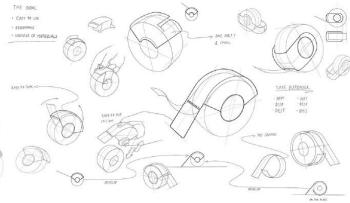
DESIGN PROCESS & DEVELOPMENT

First, I conducted research on a variety of issues concerning comparable products on the market that most people choose to use, including behavior in use and materials suitable for use.

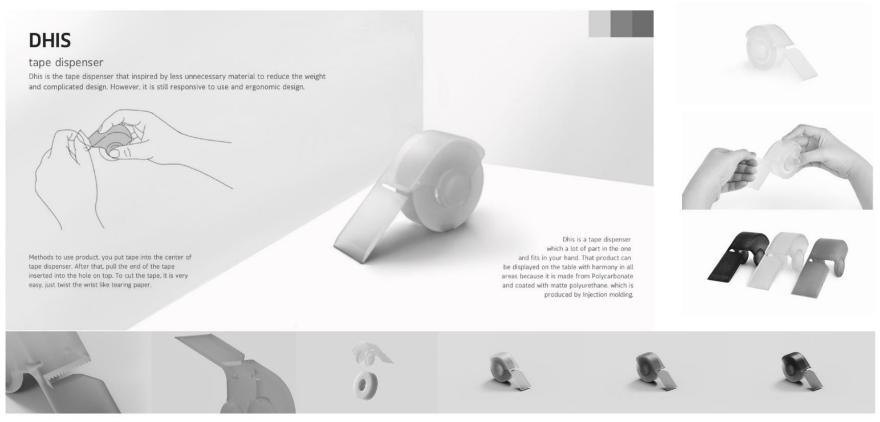
And When I obtained the information and problems, I sketched to find a design that matched the functionality of the user and I chose 1 out of 3 designs to develop and started mockups.







FINAL DESIGN



NAME : PUNYANUCH THAIPHADUNGPANICH UNIVERSITY : SILPAKORN UNIVERSITY EMAIL : THNPUN@GMAIL.COM







The goal project is to mke a tape dispenser that enjoy to use it so I thought the idea made unique character by imitate action of human was chewing which form can protect side of dispenser not dirtiness and portable



Design Concept

The Tape dispenser is designed for the education age that handy and also portable come with likable colorful character and unique usability and get design function from chewing of people. NGAB has cover a tape to protect dirtiness and also has a function to keep them together

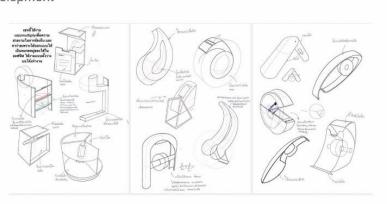
MOOD & TONES



I matched many colors to gave fun moods but still in lovely colors that my target group can chose .If you have all colors you can match color NGAB by self

Design Process and Development

The important thing is planning that how many time that I was done of all and also important is research, I researched about ergonomic, material, mood and tones, mechanical function and sizing that ideal with my target group.





studied about sizing was easy to portable and functional can possible to use.



Final Design









: Pattarawan Kongon Name University Silpakorn University Email

Pattarawan3489@gmail.com



Common clothes pegs in the market that have been used How strong is it?

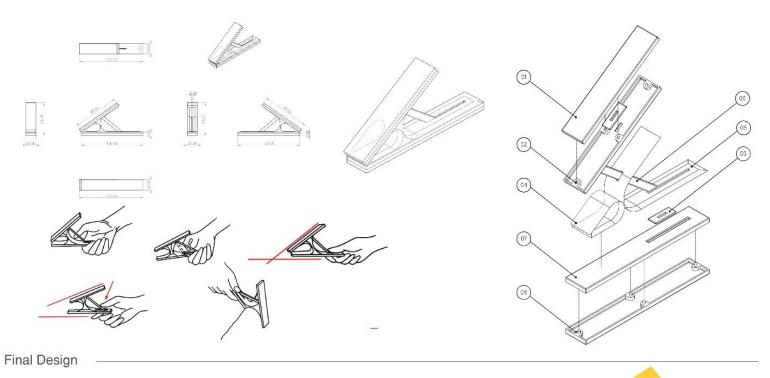
If changing the spring attenuation mechanism in clothes peg. Increase the novelty of using clothes pegs and eliminate problems caused by springs inside the clothes peg. Rust can form on clothes that can dry when the spring is exposed to water. And when applying too much pressure to the clothespins, clothespins can easily be damaged by using a spring-loaded clothespin.

Design Concept

want the clothes peg to maintain the concept of simplicity It's easy to use and looks new. Add new features to use By wanting the shape of the clothes peg to be a simple shape that comes from general geometric shapes, and cut off the spring mechanism

Design Process and Development

The clothes peg was designed by eliminating the use of a wire or spring mechanism in the clothes peg general in the market by changing the mechanism to make the clothes peg to have a bar plastic inside. It can be moved by applying pressure and pulling the plastic rod so that the clothes peg can be unfolded and can be clothes pegged. It can be used quickly and easily. The workpiece is made of plastic and TPU rubber. with lightweight Convenient and easy to use





Name : Denisa Wangkahard University : Silpakorn University Email

: Ja_denisa@outlook.com



ROOL TAPE DISPENSER

The goal of this project is to create a tape dispenser. Some tables may not have enough space to place things, and this might be what those people are looking for.

THE CONCEPT

The inspiration comes from consumer behavior and the simplicity of use. I wanted to design it for general users so that they could use it easily and the product is available in bright colors.

ROOL is based on the shape of a bench vise. I designed it to curve for safety and ergonomics.

THE DESIGN PROCESS

The design process is researched by starting with the ergonomics of a tape dispenser and mechanical products.







I created a study model and a prototype to see if it could be used.

THE CONTEXT OF USE

This tape dispenser is perfect for placing on the table or shelf in an office made. This product comes in a unique shape and it has a lot of gimmicks when you use it. You can also cut the tape in two ways. If you don't want to use the other one, you can push it down for safety.











THE PRODUCT **FEATURES** AND TECHNICAL **DETAILS**

It is compact, durable, non-toxic, and easy to use. The bodies and the cutting parts are made from ABS plastic. The lock part of the product is made from cloudy resin. which is produced by injection molding. The surface of this product is smooth. They are available in bright colors. It has many features at a low price. These parts are strongly linked together by the use of machine screws and wing nuts.

The tape dispenser comes in a unique shape and it has a lot of gimmicks when you use it. In addition, you can attach or use this product to add modernity and style to your shelves and your desk.

> Name E-mail

Jiratchaya Ampansuwan (Pleng) **University** Silpakorn University Pleng.2ping@gmail.com

It started with me as a child when I often got hurt from using sharp stationery. So parents recommend using the tape cutter that comes with the tape. That's why I don't enjoy cutting tapes at all. Since my hand muscles weren't strong enough at the time, I had to exert force to break the tape. When I switched to a tape cutter, it became very heavy and inconvenient to carry.

As I got older, I wanted to create a fun tape-cutting experience for kids. To create a good atmosphere to learn for the classroom as well as during work.

Design Concept -

The goal of project is to design a tape dispenser that can be utilized and match to the design concept. The concept came from a desire to protect children's fingers from blades. Shub! is based from fundamental shapes. Shup! is designed for people who want to be more secure. The design is targeted at children aged 6 to 14, however it can be used by anyone. The product is ideal for children who do not have completely developed muscles and are irresponsible.

SHUP! Is a tape dispenser designed for use on a desk. It is simple to use. By pressing on it to cut. The product is tiny in purpose to save workspaces. It is made from Abs plastic. The underside part is attach to nano adhesive tape so it doesn't slip when in use and the special feature of nano adhesive tape is that it does not damage the surface and can be reusable. The upper blade is made of steel, while the below blade is made of Abs plastic. It is suitable for tapes with a 3/4 in wide tape on a 1 in core.

The tape dispenser is perfect for kids or people who want more security in their life. The product is available in orange, navy blue and white in one piece. It is suitable for unisex.

Design Process and Development

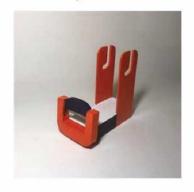
Sketches



Mock up



Final Design



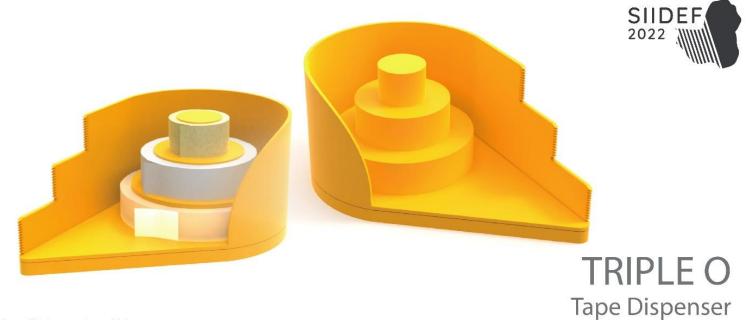








Name : Punvira Navy
University : Silpakorn University
Email : n.punvira@gmail.com



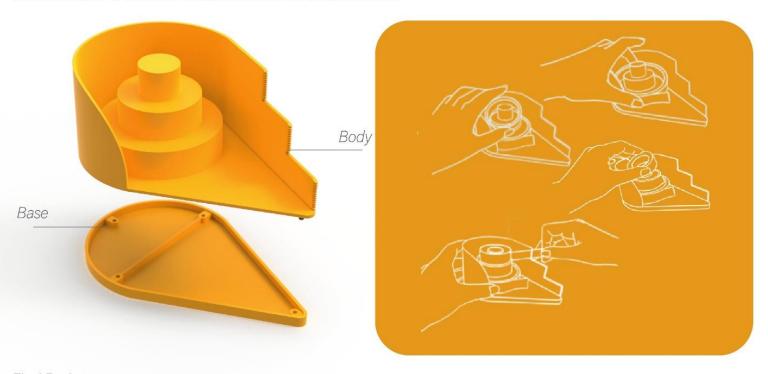
Wouldn't it be better if your tape dispenser can hold more than one size of tape and can fit up to 3 pieces? and change the original shape of the tape dispenser to be more exotic Looks more fun No more boring when you put it on your desk. Change the original appearance of the tape dispenser, and add the function of inserting tapes of various sizes When you need to use a variety of tapes, you don't need to have multiple tape cutters on the table or have to change tapes frequently.

Design Concept

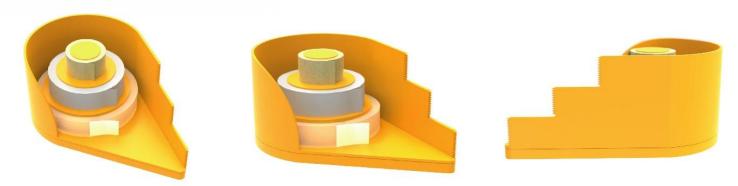
Want a tape dispenser that is easier to use and easy to change the tape when it runs out. And add more fun and color to your desk and want to design to be more versatile

Design Process and Development

The concept of designing this tape cutter came from wanting to change the way of using the traditional tape cutter to place the tape core vertically and then cut it to place the tape horizontally by the tape cutter. This is designed so that no complicated mechanisms can be used easily. Changing the tape is easy and hassle-free and can put the tape on 3 cores, namely 1 inch, 2 inch and 3 inch axes, increasing the variety of tape use in different ways. finish in one The product is divided into 2 parts, which are the base part and the upper body part. The material used is ABS plastic. The production method is injection model.



Final Design



Name : Denisa Wangkahard
University : Silpakorn University
Email : Ja_denisa@outlook.com



Universiti Teknologi MARA

Malaysia

- Under MyIPO Application, Registration No. LY2021W03916. Readiness Level is between stage 1 & 2 which are the basic principles and formulation ogmf the concept -

Problem Statement and Idea



The idea of this product was inspired by the issue of smartphone users, a basic daily technology where more people have started creating content on social media as a source of income. Video recording is also used daily for learning and teaching during the Covid19 pandemic.

The selfie camera on every smartphone is frequently used because it is easy to see ourselves while handling a smartphone. However, some features in the back phone camera do not have in the selfie camera, such as slo-mo video, time-lapse, and hyper zoom, and the front camera has a lower quality than the back camera. The user finds it difficult to see himself on the screen whether the composition is in the frame and the video is recorded or not.

Design Concept

It is designed as a viewfinder for solo creators to self-monitoring during video recording for social media content. It is user-friendly with a minimalist design and a non-electronic smartphone accessory that is affordable for everyone. The product uses a universal joint mount 1/4 socket for attachment to any existing regular tripod. The overall size of this product is not too large, measuring around 90mm in width and 170mm in length, making it potentially suitable for teenagers who want to produce content for their social media.



Lightweight



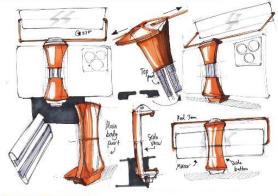


Minimalist



User-friendly

Design Process and Development



The grip holds the phone tightly and steadily in the centre with an adjustable size of up to 130mm. The attached spring will act as an adjustable grip to easily place any smartphone of any size. ABS material on the main compartment and high reflective film is majorly used for more flexibility and will not easily break. The last thing is to adjust the mirror to get the accurate reflection direction from the smartphone screen to the user. The direction of the first angle is around 30 degrees straight to the product. Users can adjust depending on the distance between the user to the camera and the height level.

User Views



SIIDEF

2022





Final Design

Features such as slow motion video and getting the better quality that does not have in the selfie camera are strong reasons why everyone should have this product. Users also do not have to invest money to buy an expensive camera to create good-quality video content.





Gold Awards - IIDEX2021 National Competition



Silver Award - MTE2022 International Competition



AHMAD AZAHARI MOHD NAZAR Name

NORHAYATI CHE DAUD ISRAQ NUR HAZRIQ MOHD FADZLUDIN

MAZLINDA ABDULLAH
INDUSTRIAL DESIGN DEPARTMENT (IDE),
COLLEGE OF CREATIVE ARTS (CCA), Affiliation

TEKNOLOGI MARA (UITM) SHAH ALAM University Email ahmad237@uitm.edu.my

Problem Identification

Existing handheld mini fan is not stable to stand up and not have many various form that can attract the user.

Idea

Oscuro was inspired by geometric form and high technolgy design with multifunction features to suit comfortability of user towards the handheld mini fan. To make the design more attract to the user.

Design Concept

Design Statement

To design the handheld mini fan with hitech concept and additional features.

Design Objective

The fan that has a hi tech design to attract user.

To design a multifunctional design to the product.

To design the compact handheld mini fan.

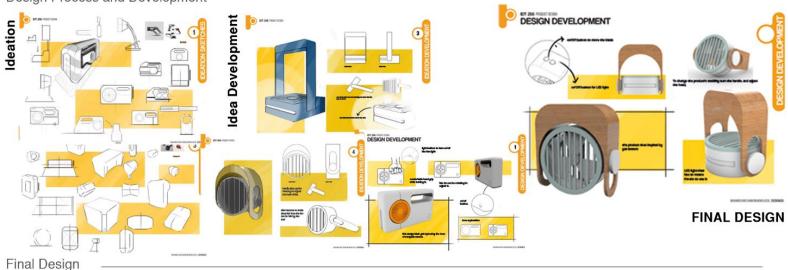
Design Criteria

- Multi-function
- Hi-tech
- Compact

Target User

- Security Guard
- Traveler
- All User

Design Process and Development



Power button that also can adjust the speed of handheld mini fan.



Comfortable handle for user.

Has another button which is for Flashlight.





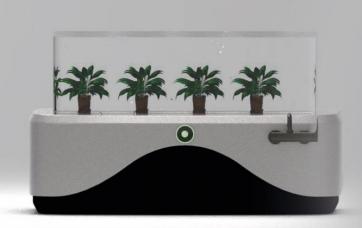
Name University Email Advisor : Muhamad Faris Fahmi bin Mohd Azizul

: Universiti Teknologi MARA : farismohdazizul@gmail.com

: Nurhikma binti Mat Yusof



Fan head can be rotated to 180 degree







PURIFY

Problem Statement and Idea

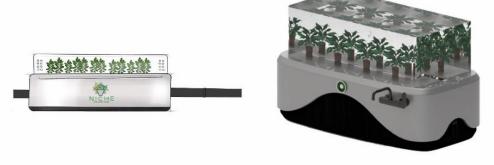
We learned during our childhood that plants help clean the air through Photosynthesis process. Air pollution is one of the risks associated with deforestation. However, did you know that plants also help to purify our water? Plants that grow on and in water take carbon dioxide and release oxygen, much like in the air. This benefits fish in aquatic areas and enhances water quality. In watery environments, plants also take up nutrients, microbes, metals, and pollutants. Recently, plant-based water filtration has drawn a lot of interest as an environmentally friendly way to purify water without using chemicals. According to recent study, plants serve a significant part in maintaining clean water by absorbing carbon dioxide and releasing oxygen, in addition to filtering our air supply. A vital resource, clean water is quickly running out as a result of increasing population growth, increased use, and supply reduction caused by pollution. To enhance supply, wastewater must be filtered, treated, and cleaned in various ways, but these processes are expensive and use a lot of energy. Modern treatment methods are definitely not organic, sometimes requiring the addition of extra chemicals to the water. The main idea is to propose a plant-based biofilters which will function as a natural water filtration as a method of sustainability that examined the potential impact of plants on remediation, or the elimination of harmful chemicals. This propose product potential to be use in daily activity and as a source of safer and quality water. A natural filter offers a variety of advantages and could replace synthetic filters in the future.

Design Concept

The design concept features the contemporary design element and considered value for money and easy function on its usage.

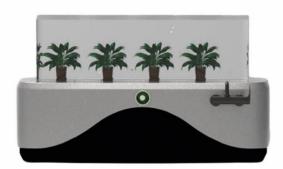


Design Process and Development



Design development considered this conceptual product to be offer as public product and blend with the environment to offer a clean and safer water by using natural biofilters.

Final Design





Name : Ahmad Dhamiry bin Ahmad Subky, Ass. Prof. Dr. Azhari Md. Hashim

& Zaidi bin Yusoff

University : Universiti Teknologi Mara, Kedah Branch

Email : azhari033@uitm.edu.my

SaniHook

"Multipurpose Hand Sanitizer"



Problem Statement and Idea

spread of the virus.

Some hand sanitizers on the market are automatically pumped. However, because sanitizer containers and pump devices are designed to be compatible only between products produced by the same manufacturer, consumers must also repurchase the container for the liquid if they replace the hand sanitizer. It is not economical and it has a negative impact on the environment by increasing waste emissions. In addition, some users may think that it is a hassle to buy a hand sanitizer-containing device-compatible again, so they pour other hand sanitizers into previously used containers and reuse them. However, sanitizers that come directly into contact with the human body are classified as medicines or non-medical products, and they are safest to use in original containers

Design Concept

To design a product which is an upgrade from an existing design of nano spray where it's function to sanitise personal way without touching the surface, provided with rubber surface especially at the hand grip section to avoid from slip out when holding it. It also comes with ergonomic size which comfortably use by male and female adult users. This product also have multi-function features where by it can be use as a holder when carrying any plastic bag and also door opener.

Design Process and Development







Name University Email : NUR'AIN ZAMZURIE & MUHAMMAD FITRI BIN SAMSUDDIN

: UNIVERSITI TEKNOLOGI MARA (UITM) MELAKA

: muhammadfitri@uitm.edu.my







BOLSA | CROSSBODY BAG

AGARWOOD INSPIRED PRODUCT: EXPLORATION ON DESIGNING MALAYSIAN PRODUCT IDENTITY

1 PROBLEM STATEMENT AND IDEA

Agarwood known as Aquilaria malaccensis that can be used in variety purpose such as fragrances, incense, medicines, aromatherapy, religious ceremonies, artwork such as sculptures, jewellery, veneer and boxes. The carving is based on the quality & unique shaped of non-resinous wood through the process known as inducing technique that helps the formation of high-quality agarwood. Due to this context, the problem or issue that has been found is the limits of carving on several areas such as carving, artwork, sculptures and the characteristic of the agarwood known as light and fibrous that disallow to use in the heavy construction. The solutions of these problem by doing an exploration to identify the durability and flexibility on agarwood. The purpose of this project is to commercialize the agarwood material as an alternative material on wearable product to enhance the value of product in global.

02 DESIGN CONCEPT

DESIGN STATEMENT

To design a parametric crossbody bag with Wau Bulan DNA Style by using agarwood for executive.

DESIGN CRITERIA

Elegant Parametric Wau Bulan genotype

PROBLEM STATEMENT

A very few of existing bag that are made by agarwood in the market.

Exclusive bag does not comes with uniqueness especially on wood material.

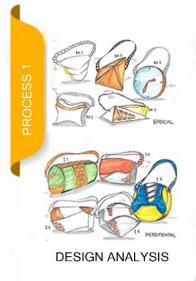
DESIGN OBJECTIVES

To commercialize an exclusive bag that comes with agarwood as an alternative material.

TARGET

Adult Collector Executive

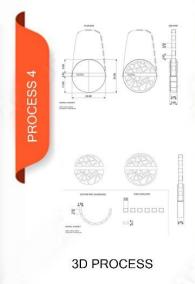
03 DESIGN PROCESS AND DEVELOPMENT





DESIGN DEVELOPMENT











3. Assembly & finishing

4. Refining the agarwood with wood varnish

14 FINAL DESIGN

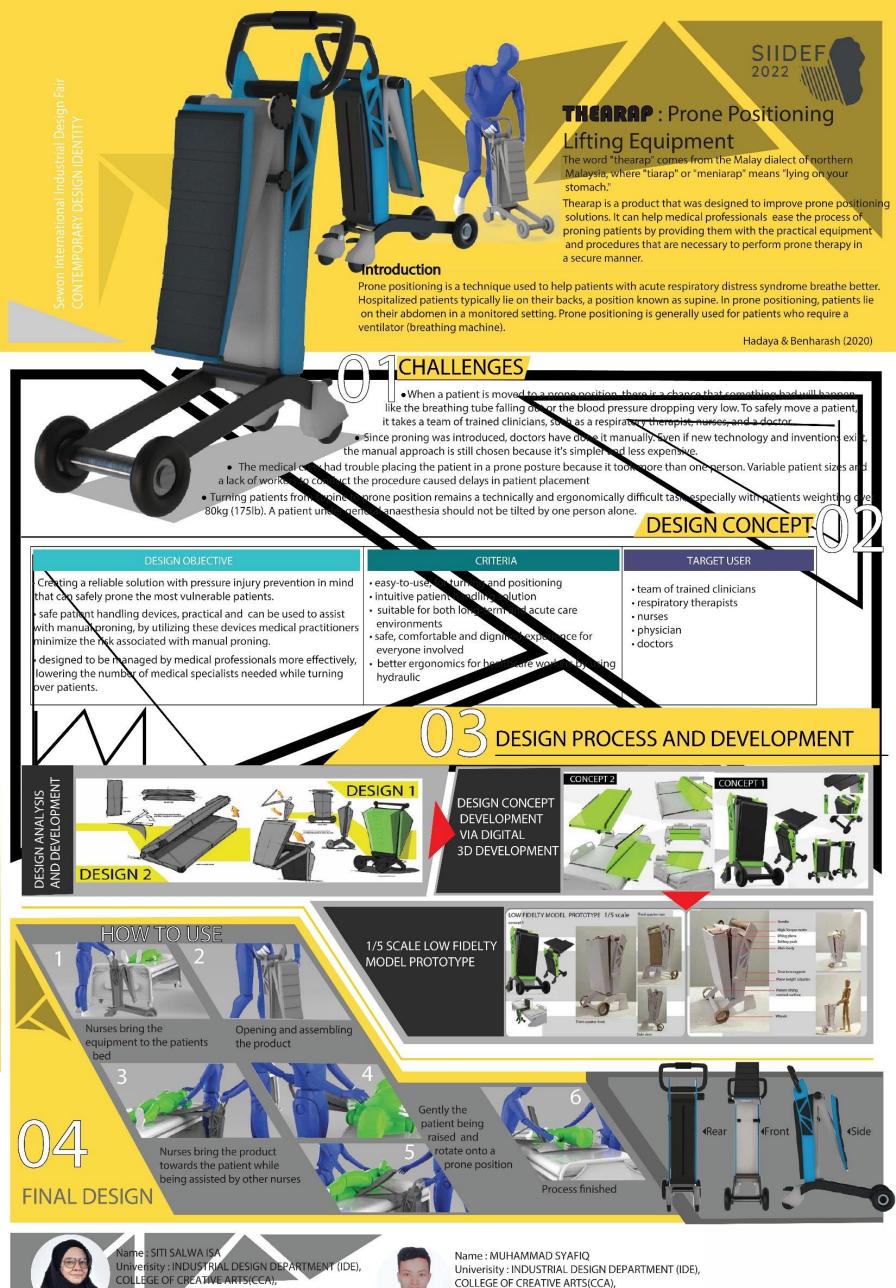




Name: ABU ALI
University: INDUSTRIAL DESIGN DEPARTMENT (IDE),
COLLEGE OF CREATIVE ARTS (CCA),
UNIVERSITY TEKNOLOGI MARA (UITM) SHAH ALAM.
Email: abuali@uitm.edu.my



Name: AHMAD HARRAZ BIN AZHAR
University: INDUSTRIAL DESIGN DEPARTMENT (IDE),
COLLEGE OF CREATIVE ARTS (CCA),
UNIVERSITY TEKNOLOGI MARA (UITM) SHAH ALAM.
Email: ahmadharraz69@gmail.com



UNIVERSITY TEKNOLOGI MARA (UITM) SHAH ALAM,

2021300755@uitm.edu.my

UNIVERSITY TEKNOLOGI MARA (UITM) SHAH ALAM,

sitisalwa@uitm.edu.my











THE COMPATIBLE SHELVING FOR MICRO-HOUSING

Problem Statement and Idea

Urbanization in Malaysia, create a resident density that slightly affect the living lifestyle in the affected area. The trends of house development also change where landed house is not a preference for a migrant who come from a rural area to a city. Micro-housing is a right term to define the nowadays trend of architecture in Malaysia. For a migrant to own a single house is actually impossible due to the cost of living (Chamhuri Siwar, 2016), that lead a migrant to rent a room as the space of living. The limited space is the main issue to this study. Also called as compact living room, activities in this "limited space" will be the best indicator in designing furniture. The issues of urbanization give an effect to the human lifestyle. The area that being effects is home living. Due to that, the architecture to the certain area (urban area, city) is design to solve the congested population of human. The problem solving for this matter is a development of micro-housing. This micro housing seems to be a compact living house that fulfilled the needs of people in urban cities.

Design Concept

| Design Statement

to design a compatible shelve for compact living space.

| Design Objective

To define the activities in a compact living house/space. To study the existing furniture layout applied in selected compact house / space.

To develop a prototype furniture base on the main activities in selected compact living area / space.

| Design Criteria

Modular Compact Green material Funtional - User Friendly

| Design Image

Simple Compatible Light Minimal

Design Process and Development



Final Design









Name : Mohd Rashidy b. Samsudin

University: Industrial Design Department, College of Creative Arts (CCA),

Universiti Teknologi MARA (UiTM)

Email: rashidy@uitm.edu.my







The history of lemang in Malaysia is believed to originate from the indigenous people found in Malaysia who use lemang as their main food. Lemang has also been one of the main foods in Malaysia since 1864. The food that is one of the symbols of Malaysian tradition is said to come from the aboriginal people in the state of Kelantan which is better known as the Negrito aborigines or it is also known as the Semang aborigines. Cassava bamboo or also known as wall bamboo, rainbow, thin or egg. Its scientific name Schizostachyum zollingeri is a type of Bamboo tree. It is suitable for use in the manufacture of food clamps, toothpicks, or food stalks. It can also be used as an ornamental tree.



Design Concept

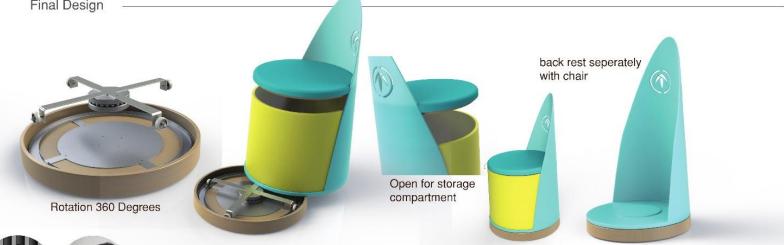


Lemang

The idea is to design a conceptual fun chair for children that is influenced by Lemang. This furniture, which is called 'Lentho', will be placed at the waiting room. The existing design that is available on the market only focuses on the aesthetics instead of the specific reasons or meanings behind it. On the other hand, the principal design of this furniture is influenced by Lemang to represent the Malaysian culture. The targetted demography for 'Lentho' consists of children aged 5-9 years old. The bamboo itself is a strong and sustainable material. The objective of this endeavour is to design a fun chair that has a Malaysian element and to showcase Malaysia's unique cultural. Next, the idea behind this shape is to make sure that children can utilise the chair in an enjoyable manner. The Polypropylene material used in this design ensures that the chair is safe for them.

Design Process and Development







Name : Ridzuan Adli Bin Azidin / Muhammad Nassyafiq Bin Mohd Nasir University : Industrial Design Department, College Of Creative Arts (CCA),

Universiti Teknologi MARA (UiTM)

Email: ridzuanadli@uitm.edu.my



Industrial Design program in UiTM Kedah consist three (3) main subjects, which are Transport Design, Furniture Design and Product Design. All of these subjects supported by the minor subjects including Model Making, Rendering, Sketching and few others. Majority of the subjects requires building materials to complete the project throughout the semester including woods, acrylics, metals and a few others. Normally, leftover material at the end of the semester are gone to waste especially the materials that were cut into small pieces. With a total of over 300 students, the amount of these solid waste materials are almost consistence and increases during every semester, making it a never ending issue. Moreover, the price of the used and waste materials are over a few hundreds of ringgit when combined together.

Design Concept

The used materials are casted-off or not consumed and they are usually disposed of. In the Department of Industrial Design, most of the used materials will be collected and then sent to the disposal centre. Among the main materials used by the students are acrylic wood. In order to avoid them from being disposed, it is better to take the approach of collecting all the used materials to be transformed as a trophy for UiTM's internal activities and programs as well as external bookings. This can generate income for student clubs and students who assist in the work of creating the designs and trophies. The price is based on the design and complexity of the trophy. The trophy is a pioneer project for the use of used materials and will be continued by producing other products under the brand name club for income generating purposes through design using the used materials. Acrylic is also a major component in the production of prototypes by Industrial Design students and most of the surplus will be disposed-off and wasted. The used woods are then produced as a result of excess student projects reapplied to create trophies or souvenirs that can be resold in order to generate student club income and to produce entrepreneurs among the alumni of IDEC and IDE. This project will follow by phase to becomes as entrepreneur identity.











This project challenge how design is perceived in a significant way using minimalism context to common watch production. The design vision is trying to accentuate user engagement particularly by emphasizing only the necessary elements of the most precious timezone daily. To solve the ability to portray the five pillar time phases for Muslims - the praying/solat time.

Unlike the smart watch advancement, this watch poses the state-of-the-art segment in sophisticated design abstraction. This collaborative design project with ARTWIST.CO integrates a storytelling watch with the unification of art in an elegant timepiece. The integration of traditional, modern, and pioneering materials, the symbiosis between the craftsmanship of watchmaking and the power of innovative design identity.

Design Concept -

LIMA watch is uniquely designed giving simplification of geometric-graphical genius at times determined essentially by the position of the Sun in the Sky. It reminds us of the equation of time & declination of the sun, the five pillars of the significant time quarter.

When technological advances have allowed for products such as software-enhanced clocks that use a combination of GPS and microchips to calculate these formulas, LIMA just accentuates the time segment in a very artistry conceptual identification. The observation of the universe - shooting star lines continuosly at 7 & 1 o'clock, 3 graphical dotted rocket booster of 6 o'clock and the science behind it yet to be discovered.

The strong identity of minimalism has given this watch design an eccentric manifestation of functional aesthetic vs technical interpretation. The LIMA project believes that each watch design must embody the spirit and philosophy of the brand.

Design Process and Development -





Final Design





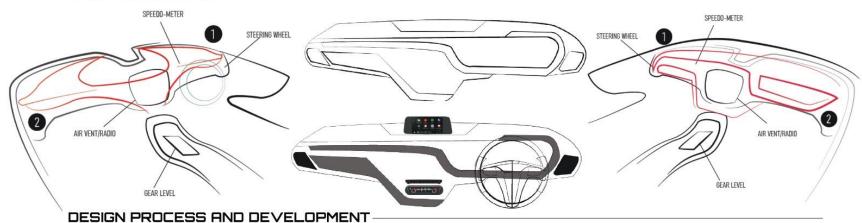


DESIGN CONCEPT AND IDEA

This project involved the redesign of vehicle dashboards by charting the emergence of two such developments enabled in the design process of KIA CERATO. Firstly, with the integration of visual-activated navigation systems into vehicle dashboards, 'advanced features symbols' becomes 'navigational iconic data'. In the idea translation process, this transformation is enabled through the implementation of new visual experiences and icon design protocols on the IPC that radically change the relationship between driver and vehicle, when performing navigational tasks.

Secondly, 'vehicle design appeal' becomes the 'driving interface' in the convergence, and customization, of dashboard features and functionality. At this point, this transformation is enabled through the spatial, aesthetic, and operational integration of typically separate aspects of the driving experience (instrument cluster, navigation, and entertainment), re-presenting vehicle-related information in new, and interactive, ways.

IDEA GENERATION -





FINAL DESIGN





Children with autism spectrum disorder have been described to have difficulties in motor skills, which include the fine motor skills (Zikl et al., 2016). Autistic children delays or barriers in fine motor skill development at age 1 – 3 years old (Beardsley, 2013), will affect a child's fine motor abilities for a long time. This statement is supported by research done by Oregon State University (2013) showed a 12 years old autistic kid has the same level physical performance as 6 years old. Additionally, some researchers discovered that autistic children have very poor handwriting, which they had problem writing letters as compared to other normal children (Brynie, 2009). Hence, with this invention it is intended to help them practice on gripping similar object to pen or pencil, where they can use colour grip as a form to exercise their fine motor skills.

Design Concept -

- Universal design element concept formation
- · Inclusive design hand grip for special need user
- Smart water coloring solution for beginners and experts
- Easy to Use, maintain, reusable and sustainable
- · Portable, Flexible & reusable



ColourGrip is an innovative watercolour brush product aim to increase creativity among user especially an autistic children who are lacking in ability to grip a handheld object and have less sense of touch. The invention and design deveopment of ColourGrip base on Universal Design concept product intended them to practice holding smoothly to exercise their fine motor skills. ColourGrip also could provide practical solution for enthusiast watercolour artist, students at various institution to expand their talents into doing something enjoyable and sustain their interest in creative art. This invention intended to help them practice on gripping similar object to pen or pencil, while exercise their fine motor skills.











Design Process and Development







Mohd Shaleh M. Mujir

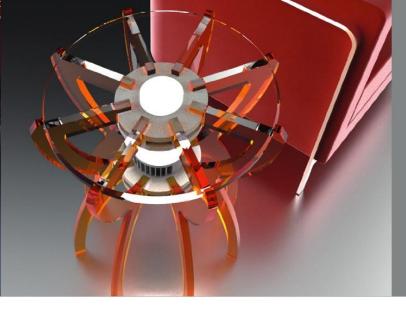
Industrial Design Programme, College Of Creative Arts (CCA), Universiti Teknologi MARA (UiTM), Shah Alam, Selangor, Malaysia mohdshaleh@uitm.edu.my



Universiti Sains Malaysia

Malaysia





Design Statement:

To create a DIY-based side coffee table inspired by jellyfish for the use of moderate people in the apartment.

Design feature:

This design will come with a lamp as an X factor, to light up the space and make it more relaxing. The main part of the design is the joint, which looks like a gear, and all the legs will fit into the slot. The light will be allocated in the centre of the Jellyfish Side Coffee Table to mimic the features of jellyfish.

Design Concept

DESIGN CONCEPT:

The concept of design mimicry has been applied in this design exercise. The design is inspired by nature where the subject matter natural is used to extract the features from either form or function, to turn the appearance of a design into something else. In this concept design stage, The designer also used the minimalist approach while conceptualizing the Side Coffee Tables with Space-saving Furniture, which uses a Slot -In System to construct and dismantle the table.

As for the extra features, the side coffee table will be incorporated with the lamp located at the centre of the table. With this 2-in-1 usage as an X factor, the consumer will enjoy the aesthetic value of the jellyfish-side coffee table.







Fabrication Stage:
In this stage, a laser cut is used to cut the polycarbonate sheet into pieces



Final Design









Email

Name : AHMAD FAIRUZ BIN ARIFF

University: PRODUCT DESIGN, SCHOOL OF THE ART. USM.PENANG. MALAYSIA

: fairuz68@usm.my

Design Statement:

To create a portable compact side table for a moderate consumer in Malaysia.

Design feature:

This design is easy to assemble and affordable price. The designers propose the concept of three (3) leg, to give more aesthetics and values to the design itself.

The ideas also integrated with smart jointing by using metal and glass.

The shape of table is circle and the user can use 360 angle.

Design Concept

DESIGN APPROACH:

Minimalism is the concept that embodies the phrase "less is more". ...

As defined by the Cambridge Dictionary, minimalism is "a style in art, design,
and theatre that uses the smallest range of materials and colours possible, and only very simple shapes or forms".

DESIGN CONCEPT:

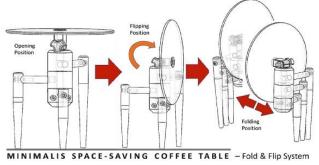
To apply the minimalist concept, to create a space-saving fold and flip-able coffee table using the concept of hinges to open and close the table.

By applying "less is more" by Dieter Ram by applying the 10 good design principles.

Design Process and Development

Fabrication Process:

In the process of fabricating the prototype, the prototype, lathe machine have being used to execute some of the metal work, such as Metal turning operation, body, arm, legs and other jointing parts.





Final Design





Email

Name : AHMAD FAIRUZ BIN ARIFF
University : PRODUCT DESIGN, SCHOOL

: PRODUCT DESIGN, SCHOOL OF THE ART. USM.PENANG. MALAYSIA

: fairuz68@usm.my





SAMA Sensible Social Distancing Furniture

Problem Statement and Ideas

Sensible Social Distancing Furniture.

Since 2019, the world has been locked down due to the COVID-19 pandemic. Then epidemics have affected lifestyles around the world. In 2022, the world is recovering from the worst outbreak of the post-pandemic era and some restrictions are slowly being lifted as the 'new-norm'. At the same time, the economy has recovered and more public spaces began to welcome people such as commercial plazas, shopping malls, parks, hotels. As a designer, we need to encourage the public to acknowledge preventive measures as recommended by health practitioners. SAMA is a social distancing furniture were designed to support new-norms with social distancing requirements, sustainable issues and design trends. Democratic design elements are used in this furniture design to meet the users demands. This design is also encouraged to use natural materials to avoid environmental pollution in the future.



Design Concept

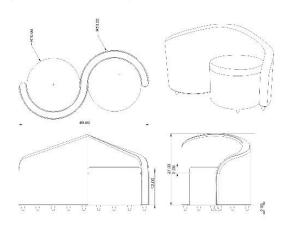
Design Statement:

SAMA is a language from the Malay language representing the meaning of balance and equality. The basic form of the alphabet 'S' is used as the subject. This design uses rattan as the main material and explores with alternative colors for fabrication. This design is also integrated with craft design and minimalist concepts through the design process and universal design principles. The design itself is to promote social distancing practices in public spaces and sustainable design.



To design social distancing seater to be used for public areas while maintaining the standard social distancing areas.

Design Process and Development



Technical Drawing



Exploded View







Colour and Material Proposal





Name: DR JAZMIN BINTI MOHAMAD JAAFAR University: UNIVERSITI SAINS MALAYSIA

Email: jazminjaafar@usm.my





The design of food delivery bags has become a hot topic as the number of individuals ordering food online has risen. The food delivery rider transports the meal and delivers it to the customer using a thermal bag called a "food delivery bag." The design of the food delivery bag restricts the riders' ability to receive orders quickly and their safety on the road. The contents of the food delivery bag may become deformed, tumble, overflow, or cause other issues when riders ride. Motorcycle riders are unable to focus on the traffic situation, so they must pay attention to the GPS while protecting their meal. In order to improve the appearance, ordering process, charging system, road safety, and food and beverage safety, a new delivery meal box design was created.

Design Statement

▲ To design a food delivery bag for delivery rider with IoT

Design Criteria

- ▲ Safety of Food & Beverage
- ▲ System of recharging (for phone/bag)
- ▲ High tech orders organise

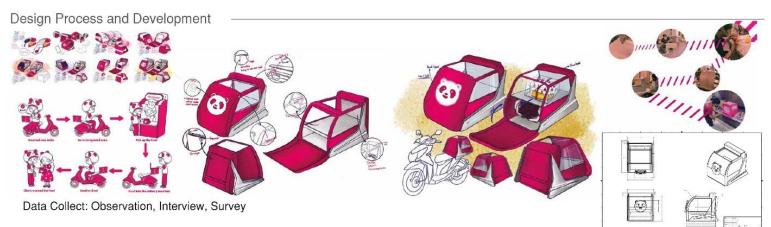
Design Concept



Design Concept:

- ▲ Futuristic
- ▲ Usability

This Food Panda Delivery Box's design concept leans more toward futurism. By modifying the material and design, this product's outside design appears to have undergone significant change. The boomerang-like pattern on the left and right sides symbolizes the delivery rider's quick and dependable delivery technique. The meal that the client has requested will totally return to the customer's hand, just like the boomerang, which will always return to its point of origin. Be bold and innovative in the use of materials, removing the original cloth covering, replacing it with a more robust material to boost the food delivery box's durability, and adding transparent glass to the design to make it simpler for the delivery rider to find the delivery order and check the situation of food at any time. Change the standard food delivery box's opening procedure and convert the original internal layer into a multi-layer so that takeout storage is more logical. Delivery will become a future trend, and since more and more young people work in this field, humanized functional design and cool looks are crucial. Apply the emphasis on user and designer collaboration to bring novel solutions to life based on what actual user feel, think, and do. The design criteria for this product were centred on the needs of the delivery rider, who is its primary target user. through surveys, interviews, and observations to gather more information regarding delivery riders' routes and workflows, opinions on how best to use the current food delivery boxes, etc. Make the design more sensible and in line with delivery riders' everyday and fashion trends.



Final Design



.

Name : Teoh Pei Ling (Erin)

University : Product Design, School of The Art, USM, Penang, Malaysia

Email : ling0325teoh@gmail.com



Students may find comfort, knowledge, sitting, light, and safety on campus thanks to the furniture. It guarantees that a location is pleasant, reachable, and beneficial to its community. The furniture on campus strengthens the connection between the university and its surroundings. Public furniture is a rarely observed topic, many outdoor furniture simply provide surface function and don't have the current features needed to work in this day and age. Lack of effectiveness of outdoor furniture and its sustainability. People lack of awareness about green accessible design furniture. The objective of this project is to identify the effectiveness of exiting university outdoor furniture. Additionally, one of the goal of this project is to create sculpted outdoor furniture with wheelchair users in mind, even special persons should receive greater attention.

Design Concept

This project's goals are to identify the issue and create outdoor furniture specifically for faculty members and students to use in the campus garden. Another goal is to create outdoor furniture that serves several purposes, such as lighting fixtures, and that uses a variety of sustainable materials for aesthetic purposes. My project is called Farta (تاورطفال) , which is Arabic for "fungus." The inspiration for my final concept came from the fungi that grow around the tree trunk in the outdoors. Natural elements and some original thought will inspire me to come up with new ideas. Design Criteria are Practicality (user friendly), Ergonomic (durability). Design Concept with modular and lighting. Additionally, to use outdoor furniture at a garden site, ensure that our furniture remains on the ground floor, a concrete floor plan is necessary. The purpose of the platform leg's round flange is to support its stability in the concrete floor. Concrete ramps are designed to make it simple for wheelchair users to access the facilities. Farta has seating for three to four persons and an ergonomically elevated table for them to use while working there. There is also a photo sensor light that illuminates the area at night. Farta is accessible furniture; users can sit on the platform and utilise the table to perform tasks, and there is an area designed for wheelchair users to also use the table.

Design Process and Development















Design Statement- To design a cream medicine squeezer container with precise nozzle applicator for skin diseases patients.

Problem Statement- The cream medicine squeeer container is to prevent the cream medicine from leaking and over dose usage due to unconscious squeezing beside providing a safe to use container for skin diseases patients. The layer of printing on the soft aluminium may decolorized and effect the personal hygience of the patients. This project is significant to ensure the hygience and prevent others allergic reaction to the patients.

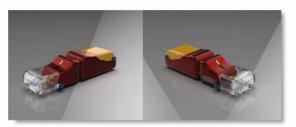


Design Concept -

The design concept of the product of this project is more on minimalism and the form of the product. Minimalism may show the cleanability of the product and the form of the product will be much modern to attract the users attention to purchase on it.

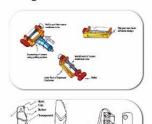




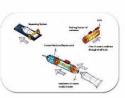




Design Process and Development

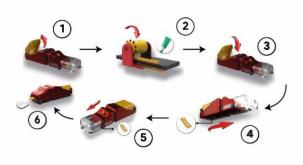








Instruction



Final Design













Outer Part

Email

Inner Part



Name : KHAW WEI HUAN

: PRODUCT DESIGN, SCHOOL OF THE ART, USM PENANG, MALAYSIA. University

: KHAWWEIHUAN99@student.usm.my



Design Statement: To design a side table with cat scratching pad for cat lover

For people who have cats at home, the furniture less or more are scratching by the cats. Cause many cats nowadays have limited or no access to outdoors. There are also those that choose to spend more time in the comfort and safety of the home and just feel more relaxed about maintaining their claws in a secure environment! Popular locations include door frames, furniture and stairs. Through the research, the researcher discovered that most of this type of furniture in the existi-

ng market is large, not portable, with limited of storage space, and less expandable. In addition, some cat scratching pads are not replaceable, so it will cause hygiene problems in the long run. So i designed this furniture most importantly to solve this problem. MEOW ME is a side table with replaceable cat scratching pad that prevent your lovely pet cats from destroying your home! A wonderful side table to spend your leisure time along with your best companion in your life.

Design Concept

Design Criteria:

• EXPANDABLE

PORTABLE

• REPLACEABLE CAT SCRATCHING PAD

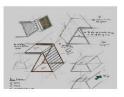
STORAGE

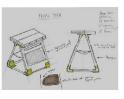
This furniture is designed in the direction of preventing damage to the furniture and at the same time promoting our connection with our cats. Spend more time on each other. And i chose wood and metal plates as the main materials for the product. Moreover, i sprayed lime green paint on the metal plate to represent the cat's mischievousness. Furthermore, i designed this

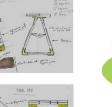
side table can be expandable so that we can put our stuff such as laptop or other things, so we can working while keeping our cat company. Next, the cat scratching pad is replaceable (magnet method) so can solve the hygeine problem. And this side table is portable so it can be easy carried. Lastly, it also has a storage function, so you can store your cat's toys, treats, books and other items.

Design Process and Development



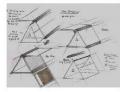


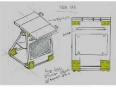












Final Design

















Name University Email

:Ng Yi Wen

:University Sains Malaysia (USM) :Yvonne0420.yn@gmail.com



Design Statement:

to design a multi function and modern shoe storage for whole family member.

Design Objective:

To let user organize their own shoes neatly and provide them more space for their shoes. Addition seats for user's convinience to sit down while wearing their shoes in comfort.

Design Concept

A djustable
N eat
G lamorous
E xpandab
L arge

A modernism concept shoe storage for the whole family. "White Angel" is a shoe storage which have a huge space for shoes for all the family members. All shoes are all well organized and looks neat. Multi function included racks inside which are movable and detachable, key holder, hidden storage and seat. User can arrange their own shoe racks their own ways by their needs of space. For parents and kids, the whole family. Racks inside can be detachable so much bigger space is provided. Seats at the bottom is for user to seat while wearing their shoe before going out. White Angel is a modern shoe storage which solve the problem of lacking space and people who had hard time finding their shoes before going out.

Design Process and Development







Final Design









WHITE ANGEL





Name: Angelic Koay Chi Yee University: Universiti Science Malaysia Email: Angelick9910@gmail.com



Adhi Tama Surabaya Institute of Technology

Indonesia





Indonesia is one of the countries that owns the most skyscrapers by ranking ninth, with the development of industry and the economy of big cities in Indonesia, of course, more and more tall buildings are being built to move the industrial sector, the economy, and as a place for residents to live. Examples include offices, working spaces, shopping centers, and apartments. In its maintenance, skyscrapers have several kinds of treatment, one of which is building glass maintenance. Hexacle is a high-rise glass cleaning drone design, as a solution to simplify the work of cleaning high-rise glass. remote control, to make the job of cleaning glass easier.

Design Concept

The design concept of this product is a special purpose drone for cleaning the glass of tall buildings. Taking the problem of high risk in glass cleaning work in high-rise buildings where officers use gondola pulleys as a tool to reach the glass of high-rise buildings. The solution is to use drones that are controlled remotely by the operator. Drones are controlled remotely by operators and supervisors, this makes workers safe and avoids the risk of work accidents. If the drone malfunctions or has an accident, it is equipped with an emergency parachute



Design Process and Development

In the design process, this drone was specially designed with features to clean glass. There are 6 propellers to produce more power, two wipers and two sponges for cleaning the glass, a water tank for carrying cleaning water and a camera that can do automatic mapping.

- 4 channels, up and down, forward and backward, right and left, sideward flight, 360 degree eversion
- Built-in 6 Axis, stronger and more stable wind resistance, both for indoor and outdoor flight
- Equipped with protective frame to reduce collision damage
- Two control modes, adapt to different operating habits
- Size: 36x31cm and height 22cm



Final Design







O,

Name : Kevin Octavidiyanto

University: Adhi Tama Surabaya Institute of Technology

Email : vidiyantokevin@gmail.com



Universitas Ciputra

Indonesia





Seiring dengan bertambahnya waktu, produk fesyen mulai dari pakaian hingga aksesoris telah menjadi kebutuhan utama masyarakat.
Selain berdampak baik pada perekonomian, peningkatan industri fesyen ternyata juga berdampak buruk sebagai penyumbang limbah terbesar kedua. Industri fesyen cenderung memproduksi tas dan sepatu dengan skala besar hingga menyisakan limbah kulit mulai dari potongan-potongan kecil hingga lembaran kulit utuh. Lembaran kulit utuh ini merupakan salah satu limbah yang cukup banyak akibat kelebihan pemesanan bahan kulit. Salah satu industri besar yang mengalami permasalahan ini adalah PT KMBS yang memiliki cukup banyak tumpukan limbah lembaran kulit utuh.

Design Concept

Untuk mengatasi permasalahan tersebut maka dilakukan kerja sama dengan PT KMBS dengan mengolah limbah kulit tersebut. Bentuk pengolahan limbah kulit yang dilakukan dalam koleksi "Kambi Serantan" adalah dengan menggunakan teknik kerajinan anyaman truntum khas Banyuwangi. Teknik anyaman truntum khas Banyuwangi membutuhkan jalinan anyam yang cukup banyak dibandingkan anyaman biasa sehingga dapat mengurangi limbah kulit dengan cepat. Selain itu, teknik anyaman Truntum sangat unik dan khas di Banyuwangi dikarenakan teknik ini cukup rumit & diperlukan pengerjaan yang detail sehingga saat ini hanya pengrajin Banyuwangi yang dapat membuatnya dengan sempurna. Dari situlah terinspirasi nama koleksi "Kambi Serantan" diambil dari bahasa Osing Banyuwangi yang memiliki arti dengan berhati-hati. Makna berhati-hati bukan berarti takut dalam mengerjakannya, namun merepresentasikan pembuatan koleksi ini mulai dari desain, anyaman, hingga produksi dilakukan secara hati-hati dan passionate agar hasil akhirnya sempurna. Harapannya melalui koleksi "Kambi Serantan" selain mengolah limbah juga dapat mengangkat localism agar masyarakat Indonesia bangga akan kekayaan karya Indonesia yang begitu indah.

Design Process and Development



Final Design











Name University Email

: Gabriella Milenia sity : Universitas Ciputra

: gabriellamileniak@gmail.com



Institut Teknologi Telkom Purwokerto

Indonesia





The development of electric pedicab is to preserve pedicab transportation in Yogyakarta as part of the cultural heritage. Now pedicab is used as an alternative transportation by tourists to get around the city of Yogyakarta. But what happened in the field appeared Betor (Becak Motor) as a modern-

The emergence of Betor is caused by pedicab drivers who are no longer strong enough to pedal due to age and job demands. Modifications made to the Betor have removed the design characteristics of the Yogyakarta traditional pedicab. Combustion in motorcycle engines makes the Betor unfriendly to the environment and goes against the principles of traditional transportation.

Based on this, the development of transportation in the form of electric pedicab is carried out. The use of electric power can help pedicab drivers in running their pedicab. However, the pedal drive system is maintained so that if the electric power runs out, the pedicab can still be pedaled. Design development was also carried out to bring out a new identity for electric pedicab as environmentally friendly transportation with the latest technology.

Design Concept

There are several problems with the operating electric pedicabs:

- 1) Lack of public understanding, especially by tourists of the existence of eletric pedicab in the Malioboro area.
- 2) Lack of stations to charge electric pedicab.

Therefore, it is needed to improve the design of an electric pedicab and design of an electric charging station.



The fender is the hallmark of the Yogyakarta pedicab. Usually has a variety of visual appear-

















Random sampling of 48 pedicab in Malioboro and there are several types of basic structures.















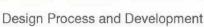






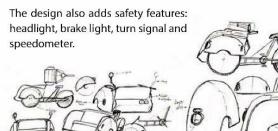


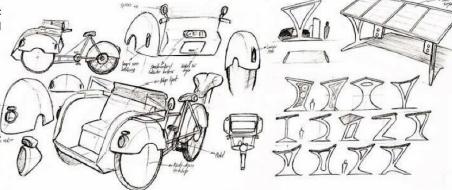






The standard structure and shape of the yogyakarta pedicab in accordance with the regulation.





Final Design



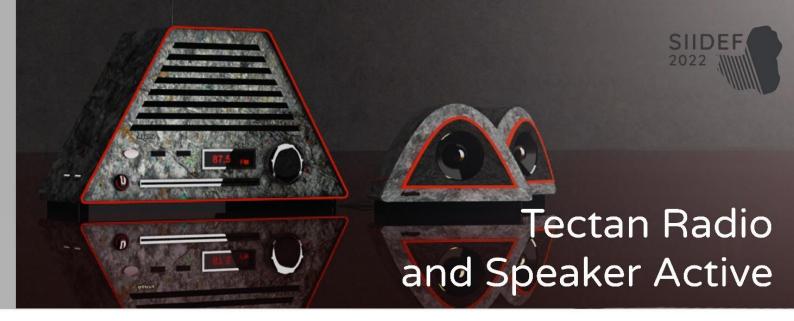


Name University Email

: Laurensius Windy O.H.

: Institut Teknologi Telkom Purwokerto

: windy@ittelkom-pwt.ac.id



The former packaging of food and beverage products has contributed to the pile of garbage, including cardboard packaging, which is increasing in number every day. One of the packaging industries that pays more attention to environmental issues is Tetra Pak. The Tetra Pak company feels that it is responsible for the cycle of its packaged products, which turns out to cause environmental problems after they expire. The Tetra Pak packaging waste is processed into a composite material known as tectan/poyfoil.

In an effort to improve research results related to the use of tectan composites as functional products, Tetra Pak Indonesia partners with a number of industries, communities and government institutions, one of which is Balai Besar Pulp dan Kertas (BBPK). From this research collaboration, has produced a specimen material with a thickness of 4 mm which is then known as composite tectan. This tectan sheet has been made functional products in the form of furnitures, paving blocks, corrugated roofs, merchandises, which are extraordinary yet take advantage of the acoustic characteristics of the





Trials of processing Tetra Pak packaging waste have been carried out in an effort to overcome environmental pollution, but there are still problems, including:

- 1).Tectan is often used as raw material for coagulant by industries through a combustion process that causes air pollution, to produce only aluminum residue.
- 2).The use of tectan materials in industry, both small and large scale, has not fully maximized the characteristics of the tectan itself, especially in exploring the acoustic capacity of the tectan material.

This project is an initiation for the development of research with a material experimental approach, in order to optimize the acoustic characteristics of the tectan material. Case studies of product development are radio and active speakers. It is hoped that this solution can be one of the product diversification strategies that increase the economic value and use value of the tectan material







Design Concept

A product has perceived attributes and associations. But, can material be said to have perceived attributes or indisputable associations? A personality? At first sight, No. It only acquires these when used in a product. Like an actor, it can assume many different personalities, depending on role it is asked to play. It's too early to assume that recycled materials are only suitable and identically for handicraft products, giving the impression of being fragile, old fashioned, primitive, and boring. The image of a material that will be lifted into a product, essentially depends on the processing, formation, and finishing process. From this design project, it is hoped that tectan can display a more fresh and modern product image.

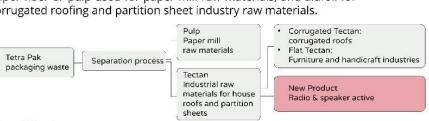
Design Process and Development

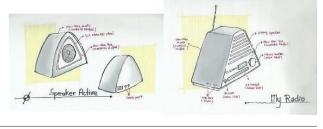
The former aseptic food and beverage packaging products, also known as cardboard packaging waste, consists of 75% paperboard, 20% polyethylene (PE) plastic, and 5% aluminum foil. After going through the recycling process, it produces 2 kinds of output, namely paper fiber or pulp used for paper mill raw materials, and alufoil for corrugated roofing and partition sheet industry raw materials.

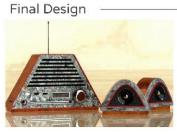
The following is an image chart of recycled products that illustrates that recycled materials have the potential to be made according to the desired image based on the processing process:



Alufoil or polyfoil, here in after known as tectan, has the following characteristics: waterproof, fireproof, good acoustic performance, and recyclelable. The following is an outline diagram of the tectan processing process:















Name : Agatha Dinarah Sri Rumestri

University: Institut Teknologi Telkom Purwokerto (ITTP) **Email**

: agatha@ittelkom-pwt.ac.id

The existence of 2000-6000 sacks of timber waste per week is an indicator of unsustainable production pattern. This happened at he Furniture Industry Center of Pasuruan City (FICP). So far, woodshavings produced has only been used as firewood and 'pediang'. Through 'design for standardization and compatibility strategy', it is aimed that resources, materials, and products can be controlled to stay in the economic cycle as long as possible, and minimize waste production. With a combination of moulding and pressing techniques, the woodshavings that no longer have solidity can be processed into ready-to-use materials (pre-module) which are directed to be developed into modules that aimed to be applied to room partitions and desk organizers. With this technique, a contoured pre-module can be made with a minimum adhesive composition (aliphatic glue) allowed is 10% and air drying technique.

Design Concept



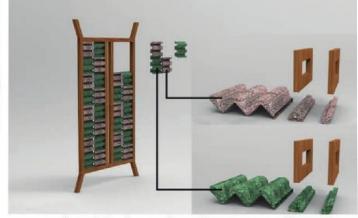
raw material



molding-cold pressed technique



ready-to-use material



contoured modul to be applicated on room partition and desk organizer

Design Process and Development



Material Exploration:

1. Material Sampling

Specimen are taken randomly from 5 SMEs, 90% are Teak

2. Mesh Separation

Generated 3 types of mesh namely coarse (image 1), medium (image 3), fine (image 2)

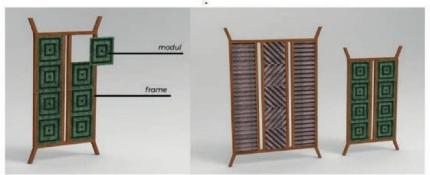
3. Mesh Coloring

Coloring experiment on medium and fine mesh for enforcement and accentuation.

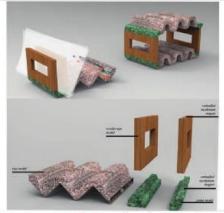
4. Manufacture Trial Error

Moulding technique experiment





(a) Ready-to-use material application on room partition



(b) Ready-to-use material application on desk organizer



Name : Rizna Eka Nursanti

University: Institut Teknologi Telkom Purwokerto

Email : rizna@ittelkom-pwt.ac.id



Universitas Prasetiya Mulya



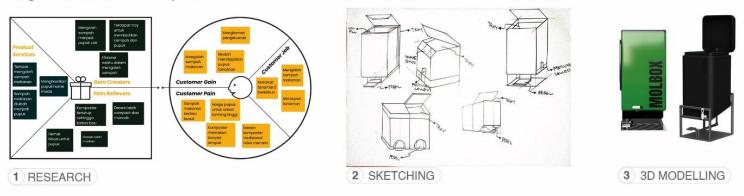


The problem that concerns this design process is the expulsion of food waste in houses and restaurants that is not processed properly and instead creates an unhealthy environment. We propose a design idea as a solution to this problem. The design is a simple composter box to process food waste into natural feltilizer for planting.

Design Concept



Design Process and Development



Final Design







Name : I Ketut Danta; I Komang Candrika Kumara

University : Universitas Prasetiya Mulya

Email : i.danta@student.pmsbe.ac.id; i.kumara@student.pmsbe.ac.id



Telkom University







Viscerra Modular Bench

Problem Statement and Idea

Fasilitas duduk modular yang terbuat dari material tidak terpakai yang dihasilkan oleh Work Coffee Indonesia. Bertujuan untuk memenuhi kebutuhan protokol Kesehatan di masa *New Normal*, selain itu perancangan produk ini juga mendukung gerakan less waste dari Work Coffee Indonesia.

Modular sitting facilities made of unused materials produced by Work Coffee Indonesia. Aims to meet the needs of Health protocols in the New Normal period, besides that the design of this product also supports the less waste movement of Work Coffee Indonesia.

Design Concept

Fasilitas duduk ini terbagi menjadi 4 komponen utama yaitu komponen kaki, penahan dudukan, pembatas dan bantalan duduk. Dapat dikonfigurasi menyesuaikan kebutuhan pengunjung dari Work Coffee Indonesia.

Menggunakan material utama Terrazzo yang dicampurkan dengan material tidak terpakai dari Work Coffee Indonesia sehingga menimbulkan corak khusus pada permukaan material terrazzo.

This sitting facility is divided into 4 main components, namely components of the legs, seat holders, barriers and seat cushions. Can be configured according to the needs of visitors from Work Coffee Indonesia.

Using Terrazzo as main material mixed with unused material from Work Coffee Indonesia, it creates a special pattern on the surface of the terrazzo material.

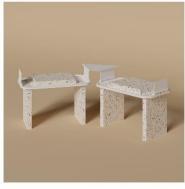
Design Process and Development

Empathize Learn about your customers Define Construct a point of view based on outstamer's needs and insights Learn dealer and the design your solutions Test Put your prototypes in front of users for feedback Prototype Release Launch the design

Final Design











Name : Achmad Reza
University : Telkom University

Email

: rezachmadreza@gmail.com







Unmanned Ground Vehicle 02

Problem Statement and Idea

Unmanned Ground Vehicle 02 ini dirancang untuk memenuhi kebutuhan suplai logistik militer yang lebih fleksibel. Unmanned Ground Vehicle 02 memiliki desain body berbahan FRP agar memudahkan dalam perakitan dan perawatan.

Unmanned Ground Vehicle 02 is designed to meet the needs of a more flexible military logistics supply. Unmanned Ground Vehicle 02 has a modular body design consisting of modular yang terdiri dari beberapa body panel several body panels made of FRP to facilitate assembly and maintenance.

Design Concept

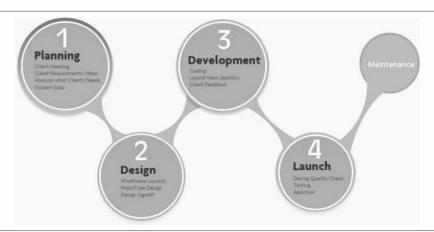
Unmanned Ground Vehicle 02 merupakan konsep kendaraan angkut tanpa awak elektrik unmanned transport vehicle concept that yang dapat dikendalikan dari jarak jauh serta can be controlled remotely and combined dipadukan dengan body berbahan Fiberglass with a lightweight and strong Fiberglass Reinforced Polymers yang ringan dan kuat.

Kendaraan ini memiliki desain yang compact This vehicle has a compact design with an dengan dek kargo terbuka serta pelindung samping yang dapat dibuka agar memudahkan dalam proses loading dan unloading logistik serta dapat digunakan untuk berbagai macam keperluan.

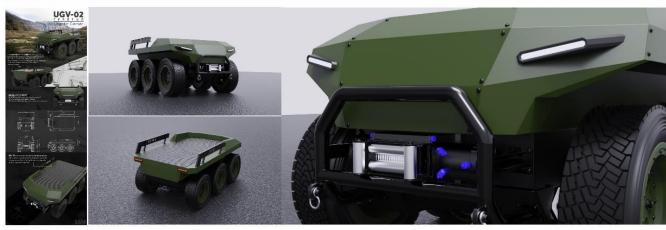
Unmanned Ground Vehicle 02 is an electric Reinforced Polymers body.

open cargo deck and side shields that can be opened to facilitate the process of loading and unloading logistics and can be used for various purposes.

Design Process and Development



Final Design





: Muhamad Ikhsan Nugraha Name Telkom University University Email

ikhsann304@gmail.com





Chest Rig for Trail Running

Problem Statement and Idea

Perancangan tas Chest Rig diperuntukkan untuk olahraga lari lintas alam. Tas Chest Rig ini didesain sesuai dengan kebutuhan pelari lintas alam pria yang menjadikan lari lintas alam sebagai hobi. Tas Chest Rig ini mengutamakan unsur kenyamanan, kebutuhan primer pelari lintas alam, kemudahan akses dan stabil saat digunakan.

The design of the Chest Rig bag is for crosscountry running. This Chest Rig bag is designed to suit the needs of male crosscountry runners who make cross-country running a hobby. This Chest Rig bag prioritizes the elements of comfort, the primary needs of cross-country runners, ease of access and stability when used.

Design Concept

Perancangan tas Chest rig ini menggunakan material utama Nylon 210D yang waterproof, mesh sebagai pelapisnya yang membuat sirkulasi udara lancar.

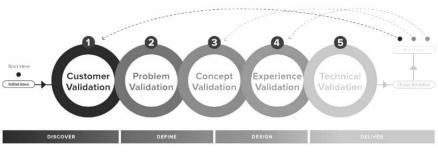
Terdapat reflektor yang berfungsi sebagai penanda apabila berada di lingkungan yang cukup gelap atau saat berada di tengahtengah pepohonan dan terpisah dengan rombongan.

The design of this Chest rig bag uses the main material of Nylon 210D which is waterproof, mesh as a coating which makes air circulation smooth.

There is a reflector that functions as a marker if you are in a fairly dark environment or when you are in the middle of trees and separated from a group.

Design Process and Development

THE PRODUCT DEVELOPMENT PROCESS



Final Design





: Pandu Arliando Name : Telkom University University

Email

: panduarliando99@gmail.com



University of Surabaya



In this era, humans are used to live in close proximity with diseases around them. People may be infected with the disease but they don't realize it. This disease can actually come from dirty toilets due to improperly use of toilets or lack of clean toilet facilities. The World Health Organization (WHO) reports that around 432,000 deaths occur due to diarrhea every year. In 2018, in Indonesia there were about 10 extraordinary cases of diarrhea with 756 patient and 36 deaths. Seeing this, the cleanliness of the toilet should be paid more attention. But not everyone can keep the toilet clean well. Therefore, we created CleaSe in hopes of being able to help improve toilet hygiene.

Design Concept

CleaSe (Clean Seat) is a water closet (WC) seat cleaning device. With this product, it is expected that the toilet will be clean from germs and bacteria every time it's used by the user, so that there's no spread of diseases.

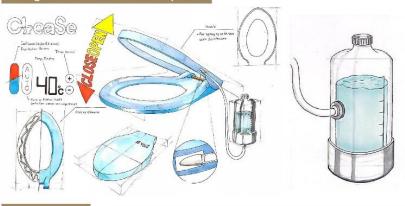
CleaSe products are WC lid and WC seat. The lid has a spray hole and the seat has a heater. The WC lid will be automatically closed after user has finished using the WC. Then through the spray hole, disinfectant and antiseptic liquid will be sprayed on the toilet seat area. After the spraying process is complete, the heater from the toilet seat will turn on in a few seconds. After a while, the toilet lid will open again and the toilet is sterile and ready for another use.

During the cleaning process, the indicator light on the WC lid will turn red. And when the cleaning process is complete, the indicator light on the WC lid will turn green. Users can open the WC lid using hand sensor technology.





Design Process and Development



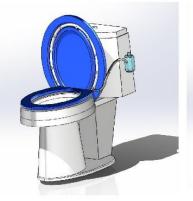




Final Design







Lorenza Michelle Soemolang

Kezia Jennifer Kurnia Richard Rudijono Derby Dinard Saputra

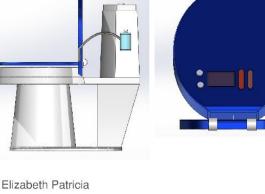
Angelus Jason Tan Michael Nicholas

University: Product Design & Management (PDM),

Faculty of Creative Industries University of Surabaya (UBAYA)

Email

ail : patricia.swot@gmail.com









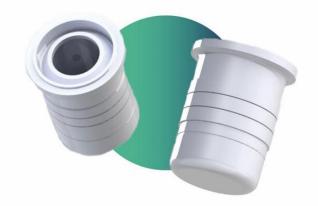
POT.IN

Problem Statement and Idea

The idea for this product was derived from the situation of scarcity and rising prices of food and raw materials, especially in urban areas. For village people, it is an unwritten rule to grow consumption crops in every house. That way they can meet their food needs from these crops. On the other hand, urban communities have also begun to have awareness to grow their own plants in their homes, but this has not been significant. Busy townspeople and the hassle of taking care of plants make it difficult to do, at least for now. Watering every morning and evening is an easy thing to do, but at the same time it is also difficult to do it consistently. In addition, most of the plants grown by urban communities are ornamental plants, not consumption crops. This resulted in the community still unable to meet their consumption needs even though they had planted plants at home. To grow plants, the easiest and most commonly used medium is pot media. Pots can help users in moving plants. Besides that, pots can also be placed in various places.

Design Concept

This pot is inspired by DIY pots from plastic bottles that have a water reservoir at the bottom, and also a rain catcher. This pot is designed for busy urban people who often forget or don't have time to water their plants. It's easy to use and very simple. has several sizes from diameters of 16 cm, 22 cm, and 40 cm, making it suitable for various types of plants of different sizes.



Design Process and Development

The hole on the inside is the main hole for planting plants, while the hole on the outside is where the air enters the water reservoir. The water reservoir is right at the bottom of the main hole, where the roots can absorb the water. The structure allows it to store water longer, so users only need to water the plants in the hole leading to the water reservoir until it is full. if the user forgets to water the plants, there is still water in the reservoir that the plants can absorb. This water reservoir can also be easily removed from the main pot hole.

Final Design

The water storage feature of this pot is a strong reason to own this product. users do not need to waste money on the installation of automatic water sprinklers which are expensive and complicated to install.





NAME

UNIVERSITY:

Marcelino Daniel Halim

Davin Ginara Heriyanto Saviorello Galvin Lienanda Putra

Kenny Fernando

Product Design and Management (PDM), Interaction Design.

Faculty Of Creative Industries University Of Surabaya

Email s180121022@student.ubaya.ac.id Achmad Rifando Ferdiyan Ganendra Haidar Amanullah









Attachable Helmet Rolling Bag

Problem Statement and Idea

Problem Statement:

Online motorcycle taxis have become a part of the daily life of various Indonesian people. The idea for this product was inspired by the problem of carrying and storing a helmet. Hanging a helmet on a motorcycle is dusty and easy to get dirty, accumulating various viruses and bacteria. Especially since the Covid 19 pandemic, many passengers are becoming increasingly concerned about the cleanliness

A helmet accessory that can be attached to the surface of a helmet in the form of a helmet bag.

Design Concept

The design of this bag is a combination of a tote bag and a tape measure, a design that combines two different items as a mechanism for loading and unloading the bag using a spiral torsion ring within the gauge. In this design concept uses a different usage concept. This bag can be removed according to the user's needs when the helmet does not need to be put in the bag, and the user can take out the bag and carry it by themselves.

An added feature of this bag is the use of silicone-based mounts to allow these accessories to follow the contours of a wide variety of helmet surfaces with 3M adhesives that are proven to stick firmly to surfaces.

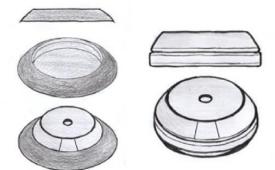
This feature allows the user to attach it to the surface of the helmet, so there is no need to worry about it not fitting when buying this product







Design Process and Development



Email

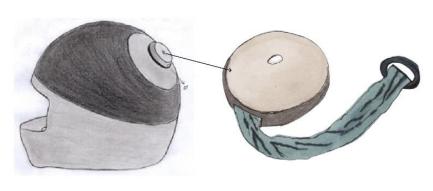
This bag can be attached to the helmet body using the adhesive on the bottom of the bracket. To use, the bag must be attached to the stand. To use, pull the hook on the side of the bag. Simply press the pull button on the top to restore it to its original shape.







Final Design









Name : Petrus Slamet Putra Wijaya

University: Product Design & Management (PDM)

Faculty of Creative Industries
University of Surabaya (UBAYA)
: 180121017@@student.ubaya.ac.id

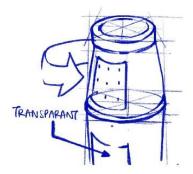
It is well known to date, that many dangerous diseases are easily spreads globally through contaminated water, including drinking-water. According to World Health Organisation (WHO), it can transmit diseases such diarrhoea, cholera, dysentery, typhoid and polio. These contaminated drinking-water is estimated to cause 502.000 diarrhoeal deaths each year. In response to this phenomenon, a well designed, efficient, and sustainable water purifier is needed. With 'WAPU' we are hoping to achieve more access for clean water in each homes globally.

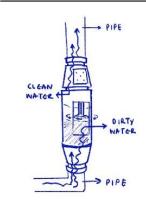
Design Concept

Many problems occur during this modern era and one of them is regarding the availability of clean water that is suitable for consumption. This phenomenon happens due to various reasons. Such as water that is polluted by old and rusty pipes, poor maintanance of water sources, and many more. According to WHO, more than 2 billion people still use water sources contaminated with feces or other contaminants. Some countries, also put mosquito larvae and other harmful ingredients so that the water looks clear and clean. But how long will these countries consume or use contaminated water? That is why we created "WAPU", a tool specifically designed to filter water and make it fit for use and even for consumption for each households.

With 'WAPU', we hope to be able to provide more clean water for each homes globally. This water purifier will be able to filter any dirty water, and stops the dangerous chemicals and germs to go through the filter. Therefore, only clean water will be passed through the pipe and be used. Other than being able to filter the water, it will be able to cleanse itself every week. Although if necessary, another way to cleanse it is to twist the top and bottom side to detach it from the pipes then cleanse it manually. The material of this product is also very crucial to the role of it being sustainable and longlasting. Therefore we chose to use stainless steel 304, because not only that it is safe for household industrial equipments, this material also has excellent corrosion resistance and value.

Design Process and Development









Final Design









Name : Bag

: Bagus Artha Benedictus Erryl Jeremy Jamie

Kefas Setiabudi Krisopras Pison Marselina Adeline

University

: Product Design & Management (PDM) Faculty of Creatives Industries University of Surabaya (UBAYA)

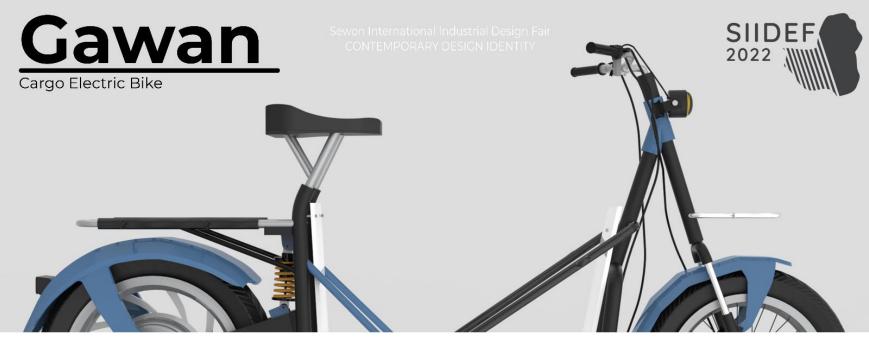
Email

: S180121012@student.ubaya.ac.id



Duta Wacana Christian University





Shopping is the activity of buying one or several goods or products according to needs or desires. This activity has become a daily activity for the mass people. Indonesian people shop at shopping centers such as supermarkets, markets, electronics stores, and so on. The need for goods of various types requires mobility to move from one place to another. The aspect of space to put goods without having to worry and having difficulty in carrying goods is an aspect that also needs to be considered in addition to the mobility aspect.

Because of problems and needs mentioned above, a bicycle will be created to carry goods with maximum weight of 20kg. The idea of the bicycle design is to emphasize the expansion and addition of space as a place to put things. The use of electric motors on bicycles is due to increasing the power and speed of the bicycle to save time and human energy.

Design Concept -

This bicycle emphasizes on expanding and adding space in the middle, back and front of the bicycle. The space is made with a flat plane and the addition of frames in the center of the bicycle on the left and right sides. The system applied to this bicycle is borrowing or renting so all people can use it without having to buy or own it. The rental system uses a cellphone by scanning the barcode on the bicycle. The phone screen will display the speedometer as a reference of the speed of the bicycle. This bicycle is provided near the bus stop to make it easier to borrow or return the bicycle.

SDGs Values

This electric bicycle is an effort to support two of the SDGs values, namely Affordable, Clean Energy and Sustainable Cities and Communities. The value of affordable and clean energy is to create and use environmental friendly products with the aim of reducing greenhouse gas emissions when using electric vehicles. The value of sustainable cities and communities is to create a city that is accessible to all people, one of which is to create electric vehicles that can be rented to carry goods.

Design Process and Development •



1.Collecting Data

The process is to conduct a case study of goods carried by workers in an online delivery service. The method used was semi-structured interviews with the workers in an online delivery service. The data were then discussed with mentor lecture.



2.Idea Sketch

After the data collection process, the process carried out is sketching ideas and adjusting or adding attributes based on government regulations.

3. Ditigal Render

The process of rendering digitally with 3D modeling applications; Blender and Keyshot.

Final Design









Name: Felicula Cardiyanta Ellia Cohen University: Duta Wacana Christian Yogyakarta Email: felicula.cohen@students.ukdw.ac.id

Coffee grounds are the result of brewing coffee drinks with hot water which if the pulp is simply thrown away can cause environmental pollution. Coffee grounds can cause anaerobic conditions that are fatal to living things that are in the water and also pollute water sources. Coffee grounds become harmful to the environment because the degracation process requires a large amount of oxygen. The increase in coffee drink consumption results in the amount of coffee grounds that are simply thrown away can result in environmental pollution in the waters, so with that a study was carried out on the use of coffee grounds with a composite technique that produces material in the form of sneets. Coffee grounds material that has been processed with composite techniques can be an alternative material for footwear production so that it can increase the economic value of coffee grounds.

Design Concept

After conducting experiments and material trials, there are composite materials that have good flexibility values. Coffee grounds biocomposite material can also be easily glued and sewn using two sewing techniques used in footwear products. Coffee grounds biocomposite sheets can also apply the structure of neoprene material which is commonly used as an upper sandal material. In the opinion of respondents, coffee grounds biocomposite sheets that have a unique texture and color and are formed naturally become a distinctive value when applied to footwear products. Based on the results of discussions with respondents who are included in the category of potential users at the Material Driven Design method stage, coffee grounds biocomposite material with a textured material side has great potential to be exhibited and applied to the outside of the product on the upper part of footwear products because it is able to be a positive influence on the environment by inspiring others to use environmentally friendly products. Respondents argued that the production of coffee grounds biocomposite material could help reduce water pollution that occurs if the coffee grounds are thrown away. Therefore, the coffee grounds biocomposite material has great potential to be an alternative material in footwear products.

The sandals will apply the nylon webbing component as a strap so that users can tighten their sandals as they wish making it adjustable. The sandals and shoes design will involve a pulltab component in the form of a 1 cm nylon webbing. Pulltabs on footwear products function as a pulling tool when wearing sandals or shoes, making it easier for users to wear products. Pulltab also serves as a component that helps users when they want to hang the product. The red pulltab will be used as the product's trademark.

Design Process and Development

Design Brief:

The design of footwear products will apply biocomposite material of coffee grounds to the upper part of the product. The footwear products that will be designed are in the form of casual shoes and sandals that can be used daily in urban environments by male and female users aged 18-25 years.

Design Exploration:







Prototype:





Final Design





Name University Email

: Matthew Christiadhi Pradipa **Duta Wacana Christian University** : matthewcpradip@gmail.com



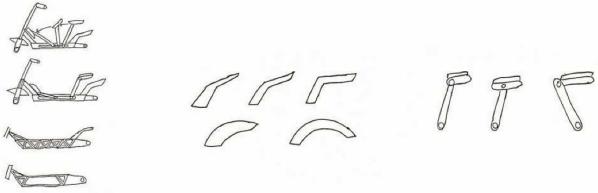


Micromobility (small lightweight vehicle) are booming around the world and one of the things that make it up is electric scooter. There are a lot of e scooter rents in big cities, but most of the scooter they provide have flimsy build quality, accident prone/uncomfortable on bumpy road and didn't follow the local (Indonesia) rules regarding e scooter.

That's why this product design concept is made to solve problem mentioned above/the aforementioned problem. The chassis are made fully out of metal to increase robustness, front suspension is added with bigger 10 inch tires to better absorb bumps also to increase comfort during riding and added collapsible seat for dual riding position. (standing and sitting down).

Design Concept

Scooter chassis that is strong, robust and able to be used in two riding modes which is standing up and sitting down.



Alternate chassis concepts (side view)

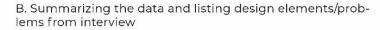
Alternate rear fender sketch

Alternate seat sketch

Design Process and Development

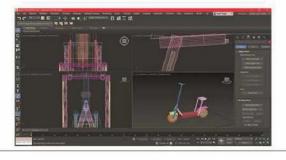
A. Collecting data by interviewing multiple e scooter rent

C. Discussing the summarized data with mentoring lecturer



D. Making 3D render as a visualization





Final Design

Telescopic front suspension



Dual riding mode (Sitting down and Standing Up)



Turning signal for better safety on the





Name University : Yusuf Tegar Bagastira

: Universitas Kristen Duta Wacana (UKDW) : yusuf.bagastira@students.ukdw.ac.id



Universitas Trisakti



The future Capital of the Archipelago requires a means of transportation that realizes Smart Transportation, Zero Emission, and Increases Community Mobility in using public transportation to support activities carried out by the community.



Design Concept -

"Autonomous Buses that implement Smart Transportation to realize the Capital of the Archipelago as a Green City, Smart City, Inclusive and Sustainable. With this concept, it is hoped that the design can be useful for the people of the Capital of the Archipelago, in particular to increase people mobility, smart transportation, and environmentally friendly vehicles.

- Operational: Transportation facilities move according to predetermined routes according to community operations in the IKN Area
- Color : Using colors that give the impression of Modern and environmentally friendly
- Ergonomics: Following the rules of ergonomics standards for adults in accordance with anthropometric standards, safe, and comfort able to operate.
- Styling : Modern represents the spirit of IKN & Nature to represent the cultural richness that exists in the area around the capital city of the archipelago.

Design Process and Development



Final Design



81

Name : Andre Hexamilenov Quinn Wijaya

University: Universitas Trisakti

Email : PSDesainproduk@trisakti.ac.id



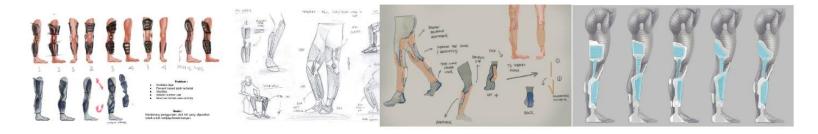
Foot stabilizer to provide support and stability equipped with guards to prevent falls and Injuries to patients at risk for falls

Design Concept -

An activity support device that functions as a personal stabilizer used to maintain balance in weak parts of the leg and also prevent a direct hit to the body when the user falls. This function is associated with the intended user's lifestyle, namely people aged 20-65 who have an active lifestyle to carry out daily activities without feeling afraid of falling where the product will function as a stabilizer to maintain balance on the feet and also as a protector.

The product will also have a lot to do with the user's touch, namely on the lower body so that the shape and surface designed should not injure the user's feet. A good shape and surface for this tool is a shape that is not angled, not sharp and smooth. And the product needs a slim and curvy shape for user comfort and safety.

Design Process and Development



Final Design









Name : Hatguina

University: Universitas Trisakti

Email : PSDesainproduk@trisakti.ac.id







You may choose your favorite work by voting through the barcode above



Seminar Summary



Seminar

Sewon International Industrial Design Fair 2022

CONTEMPORARY DESIGN IDENTITY

Optimistic yet realistic and contemporary problem solution

The SIIDEF Seminar invite two speakers from abroad and two people from within the country. In this hybrid seminar, we discuss the context of Contemporary Design Identity from design experts. We also discuss different design perspectives to work together to implement the current issues.



PRODUCT DESIGN IN (ANOTHER) THAI STYLE

Piti Khuptawathin

Assistant Professor, Silpakorn University, Thailand

EDUCATION

- Bachelor of Fine Arts (Product Design) Faculty of Decorative Arts, Silpakorn University
- Master of Arts in Industrial Design, School of Design, Savannah College of Art and Design, USA.

WORK EXPERIENCE

1997-1998 ♦ Designer, Plan Motif, Bangkok

2003 Designer, SQLA Inc., Los Angeles, California

2003-2005 Industrial Designer, Richard Holbrook Design, Pasadena, California

2005 **Teacher Assistant**, Montecito Fine Arts School, Arcadia, California

2006 ♦ Division Director, INDEX, Samutsakorn

2007-2008 Freelance Designer, Rakluke Edutex, Bangkok 2009-2010 Product design manager, Rockworth, Bangkok

Lecturer and Head of Department, Department of Product Design, 2011-present

Faculty of Decorative Arts, Silpakorn University, Bangkok

2015-present ♦ **Founder**, M/O/M (Matter of Mind), Bangkok

AWARDS

- Elle décor design award : Seating Design 2015-2016 (Thailand)
- Finalist Designer of the year 2017

Design is in our lives, where design gives direction and trends and relates to the surrounding environment. Concern for products that are safe for the environment comes from the awareness of the designers themselves, in terms of exploring how the designed products can be environmentally friendly and paying attention to environmental issues that currently happening. This industry will have specific impacts, especially related to the use, exploration, exploration materials, and designs of our lives. The hope from the discussion on these materials is that they can be helpful for the economy and also beneficial.

The first speaker was Mr. Phi Khuptawathin, who discussed and showed some of the product designs he made. Of course, the product design utilizes used goods redesigned into products with aesthetic value.

The products he produces include:

- 1. Thai-style chair
- 2. Rocket and ring-shaped inhaler
- 3. Cute stickers to decorate the car door opener
- 4. Balenciaga sandals from used mineral water bottles
- 5. Design a broken plastic chair into a beautiful and reusable chair



ACKNOWLEDGING SCIENTIFIC CRAFTSMANSHIP IN CONTEMPORARY DESIGN EDUCATION

Achmad Syarief, Ph.D.

Council of ADPII (Indonesian Alliance of Industrial Designers)

EDUCATION

- S-1 di Studio Desain Produk FSRD ITB
- **Sp-1 (Postgraduate Diploma)** di The Royal Danish Academy of Fine Art Copenhagen Denmark
- S-2 di College of Design, Arizona State University USA
- S-3 di Design Psychology Lab, Faculty of Engineering, Chiba University Japan

WORK EXPERIENCE

2018-present	Anggota Tim Pelaksana LTMPT (Lembaga Tes Masuk Perguruan Tinggi) Kemdikbudristek
2018-present	Reviewer Journal of Visual Art and Design, JVAD ITB
2019-present	Reviewer Bulletin of Japanese Society for The Science of Design, JSSD
2019-present	Anggota Dewan Redaksi Jurnal Desain Indonesia
2020-present	Ketua Forum Program Studi Desain Produk Indonesia terafiliasi ADPII
2021-present	Ketua Kelompok Keahlian Manusia dan Desain Produk Industri
	FSRD ITB
2021-present	Anggota Tim Komisi Mutu – Satuan Penjaminan Mutu ITB
2022-present	Anggota Tim AdHoc Pendidikan 4.0 – Direktorat Pendidikan ITB
2022-present	Anggota Board of Reviewer – LPPM ITB
2022-present	Reviewer Journal of Civil Enginering, Planning, and Design (JCEPD),
	Institut Teknologi Adhi Tama Surabaya

The material he presented concluded that human interface more with a product that not only appear as a physical artifact but also relates to complex service, interconnected system, and personal experiences.

As a result:

- 1. Increase the complexity of the design.
- 2. Decrease imitation of mass manufacture.

Design education should adapt, change and be prepared.

Product design is expanding with the assistance of digital technology, envisioning solutions to improve people's lives. Due to the evolution of its scope of activities, design may be defined as scientific craftsmanship.

Product designers must now know digital tools for 3D modeling, designing, and redesigning.

Knowledge of digital fabrication

technologies (3D printing, rapid prototyping) and the ability to empathize with users' problems in making products (sustainability, aesthetics, and social dynamics) are also essential.

1. Design Morphology

Learning to understand the aspects of aesthetics, perception, and materialization of object compositions, either derived from nature or everyday objects, by using the physical model as the primary research tool.

2. Biomimicry

Learning to look for "Solutions." Proven by nature and imitating tricks from nature, to have a better harmony with the environment and be sustainable in the long term.

3. Augmented and Virtual Reality
We are learning to use and create
an augmented and virtual reality
with new products, services, and
systems.



Ben Wirawan
CEO of @Torch.id

HOW THE
ABUNDANCE OF
INFORMATION
HAS CHANGED THE
WAY WE
COMMUNICATE &
DESIGN IN TORCH.ID

EDUCATION

- FSRD ITB, Sarjana Desain Program Studi Desain Produk Industri
- Non Degree National University of Singapore Faculty of Business Administration, (Program on Small and Medium Enterprise Management, International Marketing and Asia Pasific Business)

ACTIVITIES

2012-present • Entreprenerial Mentor Sekolah Bisnis dan Manajemen

Institut Teknologi Bandung

2019-present ♦ Dewan Pengarah Komite Ekonomi Kreatif dan Inovasi Jawa Barat

AWARDS

- 2008 ♦ Indonesia Good Design Selection Award. Maha Nagari Eco Packaging
- 2019 Penghargaan Persatuan Wartawan Indonesia, Start-up retail inspiratif Jawa Barat
- 2019 Indonesia Good Design Selection Award. Torch Arrafa: Sendal Umroh dan Haji
- **2019** Indonesia Good Design Selection Award. Torch Bali Evo: Tas Backpack Traveling Good Design 2019
- 2020 Anugerah Bangga Buatan Indonesia. Torch Guard: Top 3 Manufacturing Category
- 2020 Golden Bauhinia Cup, China-ASEAN Industrial Design Award. Torch Guard Exellence Award

His presentation concludes that communication design is media, like radio, television, magazine, and newspapers. The quality of data from conventional media is very detailed and focused. The condition where communication designers work, ads are like a bowling ball, spin is like a consumer, and what surrounds bowling is all communication media.

1. Pioneers

Pioneers in a company are business

that offers unprecedented value. They are the blue ocean and the most potent source of profitable growth.

2. Migrator

A migrator is defined as a product or business offering better than most other businesses in the market.

3. Settler

Settlers are defined as an imitation of other businesses or products.



INTEGRATED PRODUCT DEVELOPMENT & DESIGNER ROLES

Prof. Abdullah M. Hariri Universiti Teknologi Mara, Malaysia

EDUCATION

- B.A. ART AND DESIGN (INDUSTRIAL DESIGN) 1986 Institut Teknologi Mara (ITM), Shah Alam, Selangor, Malaysia
- B.A. (HONS) TRANSPORT DESIGN 1991 Coventry University, Coventry, UK
- M.A. AUTOMOTIVE DESIGN (Dinst.) 1997 Coventry University, Coventry, UK
- POST GRADUATE CERTIFICATE IN RESEARCH METHOD 2005 Birmingham City University (BCU), UK
- Ph.D DESIGN, IMAGE AND IDENTITY 2008 Birmingham City University (BCU), UK

WORK EXPERIENCE

- ASSISTANT DEVELOPMENT OFFICER / DESIGNER
 - Malaysian Handicraft Corporation
- AUTOMOTIVE DESIGNER
 - Motor Panels Co. Limited Coventry, United Kingdom
- DESIGN MANAGER
 - Nomad Automotion Systems, Winchester, United Kingdom.
- MANAGER DESIGN CENTER
 - Pusat Daya Cipta (PDC), Faculty of Art & Design UiTM
- HEAD OF INDUSTRIAL DESIGN
 - Industrial Design Department, Faculty of Art and Design UiTM
- DEPUTY DEAN
 - Research, Industrial Lingkages, Faculty of Art and Design, UiTM
- **DIRECTOR**: National Design Centre (NDC) UiTM
- GENERAL MANAGER
 - Malaysia Design Council, MITI (2017-2020)
- DESIGN LECTURER
 - Universiti Teknologi MARA UiTM (1991-present)

His presentation concludes that design is beyond beauty, usability, image identity, quality, values, sense, and pleasure. Good design makes a brand memorable. Design is a powerful way for companies to differentiate their products and functions by maintaining design consistency, heritage, brand image, and identity.

Identity is significant for design because a complete and unique brand image is essential to building a good relationship with customers. If they share the same values, they will be attracted to the brand and will likely feel comfortable choosing it over the competition.

Contemporary is a design style that is 'trending' or being produced. So, contemporary can be eclectic. Whatever is going on right now. Contemporary is dynamic, not bound by an era.











Sewon International Industrial Design Fair 2022 An Exhibition Book

CONTEMPORARY DESIGN IDENTITY

Optimistic yet realistic and contemporary problem solution

A designer is basically a problem solver, who creates a design based on the existing problems. Designers should always be optimistic about any progressive changes that are now underway, but also remain realistic. The belief that designers must cultivate is that they are able to find contextual solutions according to the times and technology, along with the problems that arise. Designers participate in finding current and future solutions.

There are many approaches that can be applied by designers in resolving these issues. One of the options is contemporary design. Contemporary Design basically does not focus on just one style but uses many identities (e.g., modernism, minimalism, art deco and other global styles). Contemporary design identity must continue to adapt and be adjusted to respond to current problems for the sake of future sustainability.

A designer who has a vision to solve problems regarding sustainability, is expected to have the sensitivity to design a product/design that produces positive outcomes.

What kind of contemporary design does the world need right now? How to apply the phrases of optimism and realistic into the design process according to the need to solve the problem?



Aliansi Desainer Produk Industri Indonesia **Divisi Penerbit ADPII** Jl. Flores No.3, Citarum, Bandung Wetan,

Kota Bandung, Jawa Barat 40115

