



WEB 2202
Web Programming

WEB PROPOSAL

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Programme: Bachelor of Software Engineering

Year / Semester: Year 2, Semester 4

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Company Logo



Company Description

Green Stuff was founded in Selangor, Malaysia in 2022 by me, Lee Kah Hoong and my friend, Long Chow Wai with the inspiration of the Sustainable Development Goals of the United Nations. Green Stuff's mission is to reduce human-caused environmental impact for a more sustainable and greener future. While our vision is to contribute positive influence on the country and even the world starting by collecting recyclable materials to process and redesign, then selling them at a lower price that everyone could afford. We believe that the future of sustainability lies in circularity, therefore, our products are 100% made from renewable or recycled materials like single-use plastic bottles, ocean-bound marine plastic (OBP), etc by cooperating with recycling companies like Heng Hiap Industries Sdn. Bhd., a fully integrated plastic recycling company in Malaysia and the campus with a conscience, Sunway University that always emphasises the SDGs by having their creative students design all kinds of recycled products for us to produce and sell. At the same time, all profits earned will be used to cover the running costs of the company, while the extra profits will be channelled for charity purposes.

At Green Stuff, we sell all the recycled products on our e-commerce website and our physical pop-up shops which will be located at different locations and last for one month each according to our schedule posted on the website around Malaysia. Of course, Sabah and Sarawak are also included. Products like decorations, daily essentials such as water bottles, toothbrushes, joggers, and many more are available which are suitable for all age groups. Customers can easily browse through the website to check our products out or visit our pop-up stores to learn more about recycling and the Sustainable Development Goals of the United Nations and also get our products made with love and green.

Purpose of Website

Green Stuff's website mainly focuses on the selling of recycled products and also promotes the importance of sustainability and recycling to our country and the Earth. In addition, the website will be including our company's information like the pop-up store's location and schedule, contact details, about us, and all products we are selling. Our website also allows customers to register themselves as "Greenies", Green Stuff's membership which can get an extra 5% discount for all of our products online and offline. After registering their membership, they can easily log in by using the email and password they used during the registration on the login page to browse as a member. Then, customers can add the product they are interested into the cart page before checking out. Of course, they will be prompted to log in to their account when they are checking out with a pop-up login box. Besides, we will be providing a contact form for customers to fill in their enquiries so that we can contact them back later to assist them under the "Contact Us" page.

At Green Stuff, the products are categorised into three main categories on the website which include decorations, clothing & bags, and everyday products. For decorations, we have a hanging planter, nature wreaths, spoon lamp, newspaper lamp, candle holders and a light bulb vase. On the other hand, we turn plastic bottles and marine plastic into the thread that is used to knit the bags and clothes we sell which include tote bags, joggers, t-shirts, etc. Lastly, for everyday products, we have toilet paper, toothbrushes, water bottles, etc. Most of these products are fast-moving consumers good, therefore it ensures the frequency of consumption which guarantees sales. While the design for these products is the same except there might be some tiny differences in the colour as the materials used are recycled materials therefore there might be some inadequate.

Besides that, our target audience will be mainly focused on students and housewife who likes to do online shopping. For the student segment, we introduce interesting products like spoon lamps, tote bags, joggers, t-shirts, pencil holders, water bottles, etc which they will be using frequently in their daily lives. While for the housewife segment, we have specially designed decorations like hanging planters, nature wreaths, everyday products like toilet paper, toothbrushes, food containers and others to attract their interest so that they will be interested in buying from us. By targeting these two segments, the exposure of our recycling concept and products will increase significantly as they often socialise with friends at school or other

housewives at the market or are even active on social media. Therefore, when they share pictures of our products on social media, the products with the special design they are using might attract the interest of people around them, therefore people start to know more about how useful recycled materials are and even buy from us. Our website can also be easily shared with other people by simply sharing the link to our website.

Design Methodology

There are five main phases while building this website, which is scoping and planning, conceptual design and research, development of methodology, implementation of methodology and revision of the methodology, as shown in figure 1. In the first phase, we focus on planning the overall direction of the website with the understanding of the objective of this website, the requirements of the company for the website, the products the company is selling, and the time given to deliver the website. Next will be developing conceptual design and researching. Following by the development of the methodology which we will document every task with detailed descriptions while developing the website. Examples, applicable tools and techniques, inputs, outputs, etc. Then, it will be the actual implementation where a customer will be involved. Lastly, the revision of the methodology will be involving the revision and final touches of the website.

FIVE PHASES

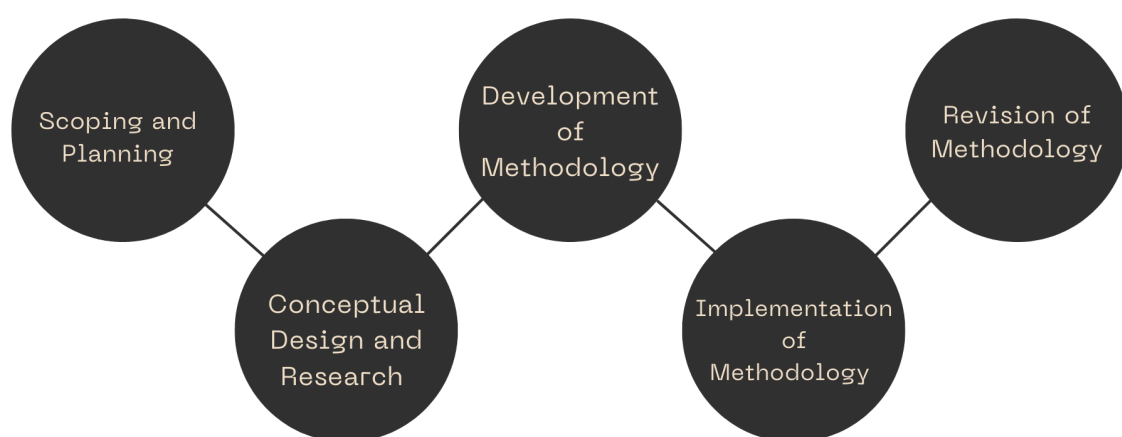


Figure 1: Five Phases

The IDE we will be used in developing this website will be Visual Studio Code, a source-code editor by Microsoft. While the programming language will be including HTML, CSS, JavaScript, and PHP. After gathering information and sketching the website interface, we will

be implementing HTML. An image tag, anchor tag, input tag, button tag, phrase element, video element etc will be used for the HTML implementation. While for CSS, external style sheets will be created and linked to HTML files using the link rel attribute. The CSS properties that will be used include font-family, font-colour, background-image, background-repeat, align-items, flex-direction, margin, etc. Apart from that, the @media property and display block property will also be used for a more user-friendly experience. On the other hand, Java Script also will be added for extra beneficial functions. Lastly, PHP, a language that allows us to easily create dynamically generated pages will be applied together with the software tool, XAMPP as it is a web server that consists of MySQL Database and interpreters for PHP. While MySQL is a database management system that allows the addition, access, and process of data.

Timeline

By referring to figure 2, the timeline arranged for this website will be started with information gathering, then planning, design, content writing and assembly, coding, testing, review, and launch, followed by maintenance. The estimated time for gathering information will be 1 to 2 weeks, planning will be 2 to 6 weeks, the design will be 4 to 12 weeks, content writing and assembly will be 5 to 15 weeks, while coding will take 6 to 15 weeks, and last but not least, 2 to 4 weeks for testing, review, and launch.



Figure 2: Timeline

Site Content

Green Stuff's website includes information about recycling and the SDGs of the United Nations to promote customers' knowledge of recycling and how important it is to go green before it is too late. Not only that, it mainly promotes the products we created using recycled materials and allows more exposure of the products to society. This website allows customers to view and know more about the company like the latest products, the story behind it, store locations, contact methods, all products, and the price. It also allows customers to shop online. Customers can sign in or register for their account with their email address and add a number of certain products they are interested in to their cart and also search for the product they are interested in. On the main page of the website, there will be some interesting videos about recycling and advertisement for ongoing pop-up store locations. There will be a search bar for users to quickly search for the product they want on the home and product pages. To check out the product or product categories, customers can simply click on the title or picture to access the respective product page for more information. Moreover, on every page, there will be a header which includes the navigation bar, and also a footer that comes with links that can bring customers to the website's content pages including the pricing table for all products, all products page and also customers' profile which should be consistent on each page. There are also icons to navigate customers to the social media page of our company in the footer. While on the bottom of the footer, there will be a copyright message which will appear on every page of the website.

Next, on the product page, customers will be able to see what's new at Green Stuff. The website will contain all the products we sell which are hanging planters, nature wreaths, spoon lamps, newspaper lamps, candle holders, light bulb vases, tote bags, joggers, t-shirts, shorts, pencil holders, toothbrushes, water bottles, food containers, toilet paper and many more coming soon. By clicking the image or the title of the product, they will be directed to the details of the product. For product that has different colours, there will be a list showing the colours included. They can easily choose the colour and quantity they want and then add it to the cart. Besides that, the size, weight, materials and also the care guide of the product will be shown. In addition, customers can check the company's details by clicking the name of the page they wish to visit on the navigation bar like about us, store locations, contact and cart pages. Next, on the about us page, there will be a video of an advertisement about Green Stuff. There will also be a story about the company under the video for customers to know more about the company. Furthermore, customers can easily locate our pop-up stores by visiting the Store Locations page

which includes the address of the pop-up stores. On the other hand, when customers have any enquiries, they can simply enter their details and message under the contact page or even contact us directly via the contact method we provided for further assistance. Lastly, on the cart page, customers will be able to see the products they added to the cart before they check out. They are also allowed to remove the products they added to their cart or adjust the number of products they want. At the same time, the total amount will also be shown on the same page.

In addition, customers will also be prompted to sign in by entering their details in the pop-up box after clicking the “Checkout” button on the cart page. While on the sign-in pop-up box, the user will be prompted to register as “Greenies” if they are not a member yet by filling in the form which asks for their email address, username, contact number, date of birth and password after clicking “Not a member yet?” button. The details that customers used to register their accounts will be saved to the MySQL database. For the sign-in pop-up box, there will be a cancel and cross button for customers to close the pop-up box and also a sign-in button to submit their details. Apart from that, a checkbox will also be provided for customers to agree to our terms and service or the “remember me next time” function on the sign-up page and sign-in pop-up box. There will also be a forget password button for customers to reset their password if they forgot theirs. After signing in, customers can enjoy up to a 5% extra discount on the products they are buying. Furthermore, for the contact us form, the registration page and the sign-in pop-up box, we will be adding an email checking function to make sure the customers fill the email address field with their email instead of some random text. An error alert box will appear when the customers filled in a non-email format detail in the email box. At the same time, a sign-up or sign-in successful alert box will also pop out when the user entered the correct information. Of course, for the enquiry form on the contact page and registration page, phone number and email format checking to ensure customers who are submitting the enquires are not spamming or giving a wrong detail so that we can get back to them easily.

Prototype Design

By referring to figure 3, it shows the home page of the website which contains a navigation bar on the header and a few navigation links on the footer. Following by interesting videos about recycling and the ongoing pop-up store location. By pressing About Us on the navigation bar, you will be directed to the about us page, shown in figure 4. On the about us page, there will be pictures of our founders, and also our partners. It also includes the story of our company. Customers can sign up as “Greenies”, which is a member of our company by clicking the sign-up button under our story.

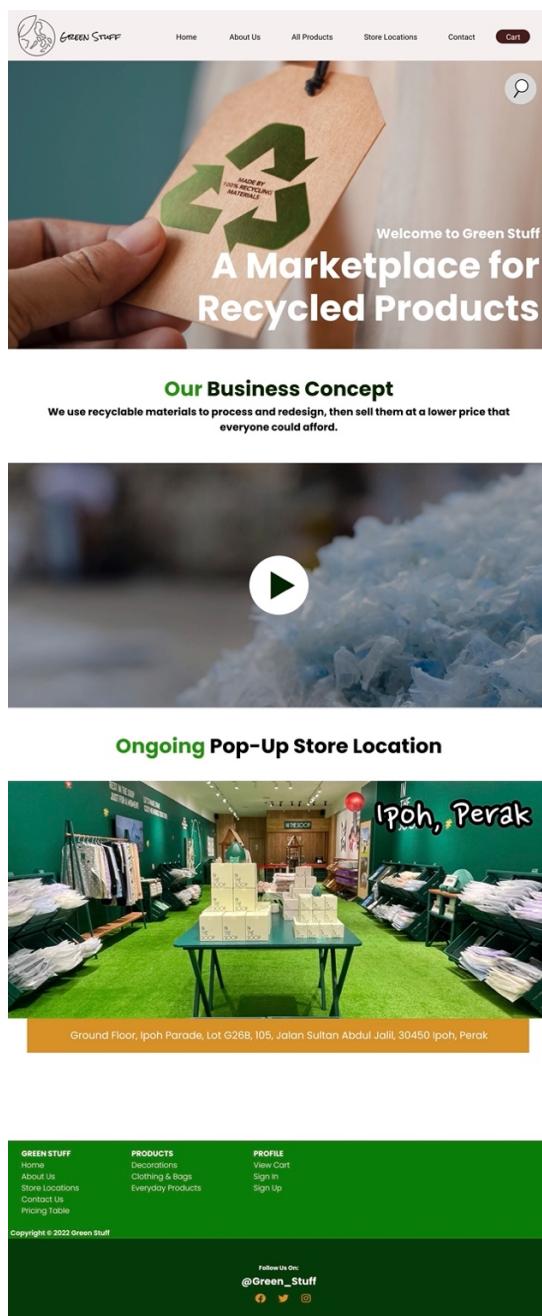


Figure 3: Home Page

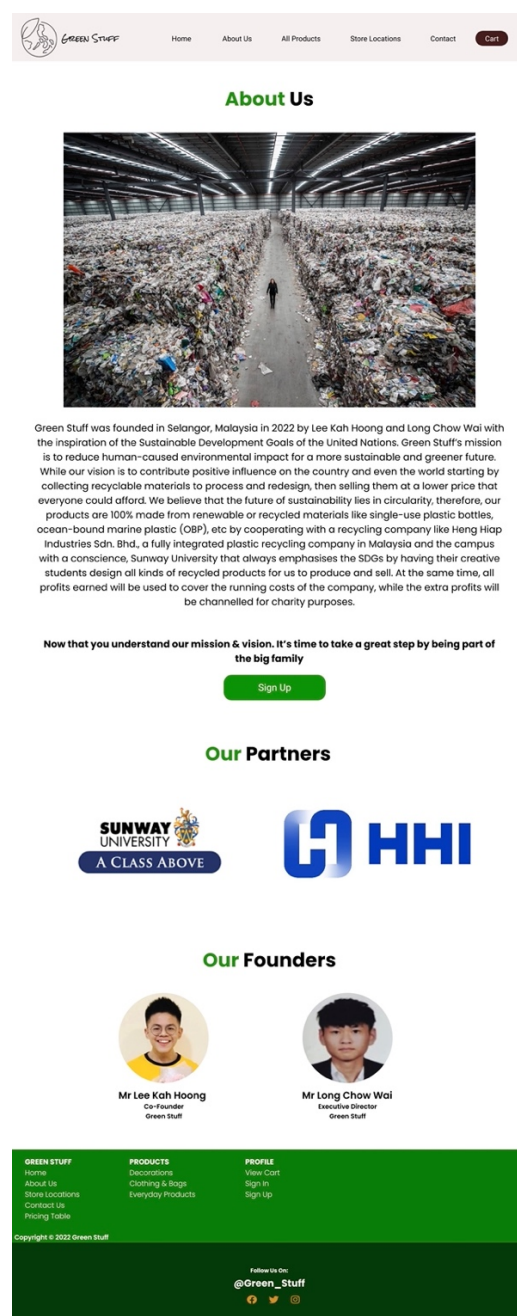


Figure 4: About Us

Furthermore, by visiting the “All Products” page shown in figure 5, customers can see the three main categories of products we sell. Customers can easily check out our product by clicking the title or picture of the product listing. After clicking it, there will be a list of products which is under the category, shown in figure 6. By clicking the product customers are interested in, customers will be directed to a more detailed product page, shown in figure 7, which includes the description of the product, the size, washing instructions, etc. Customers can easily select the preferences they like for the product and the quantity they want to add to the cart.

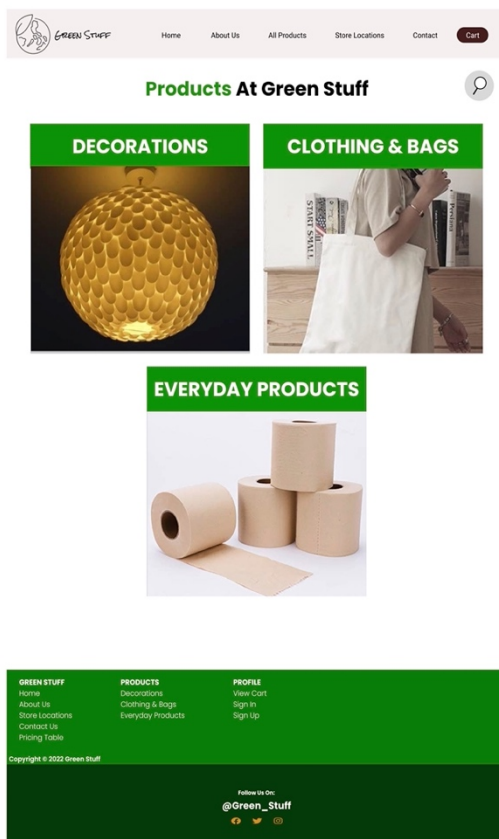


Figure 5: All Products Page

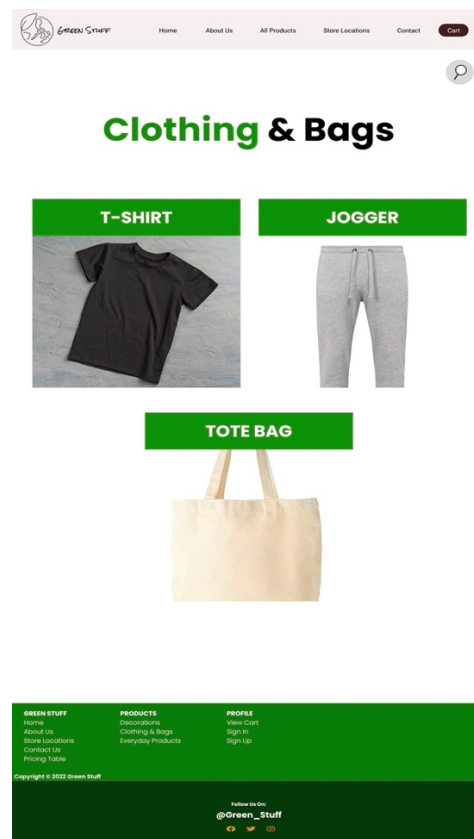


Figure 6: Clothing & Bags Page

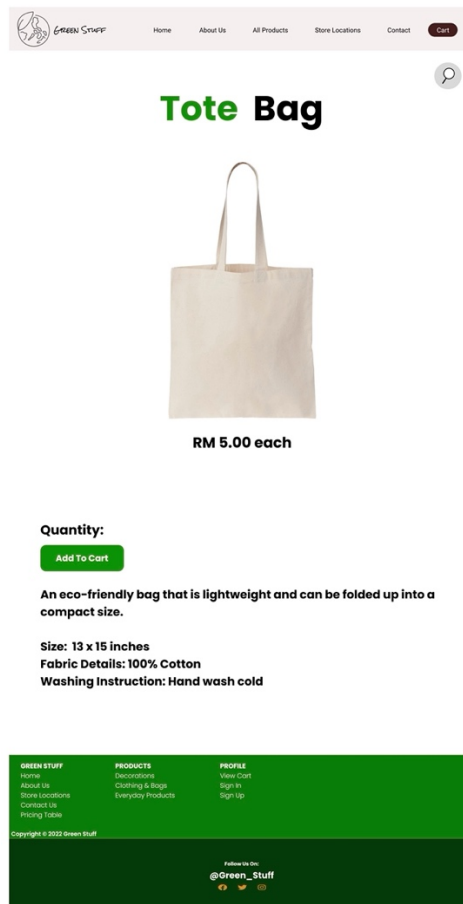


Figure 7: Detailed Product Page

When customers visit the cart page shown in figure 8, they can see what they had added to the cart and the subtotal for the products they added. They can choose to checkout or continue shopping by clicking the button below. Customers will be redirected to the product page if they choose to continue shopping. If they choose to check out, a sign-in pop-up box will appear for them to sign in, as shown in figure 9. If they are not a member yet, they can click “Not a member yet” where they will be redirected to the sign-up page to fill up their details for registration, as shown in figure 10.

Shopping Cart

Tote Bag

Product ID: 452581

RM 5.00

Quantity: 1

Subtotal: RM 5.00

Checkout

Continue Shopping

Shopping Cart


Tote Bag

Product ID: 452581

RM 5.00

Quantity: 1

Subtotal: RM 5.00


×

Email Address

Enter Email Address

Password

Enter Password

Sign In

☒ Remember Me Next Time

Cancel

Forgot password?
Not a member yet?

Checkout

Continue Shopping

Figure 8: Cart Page

Figure 9: Sign-in Pop-Up Box

Sign-Up as a Greenie!

Join us for extra 5% off on our products!

Username: Phone: Email:

Sex DOB:

City: State:

Address:

Password:

Re-enter Password:

☐ By checking this box you agree to our [Terms & Service](#)

Submit

Figure 10: Registration Page

Next, for the “Store Locations” page shown in figure 11, it will show our pop-up store location according to period. Last but not least, under the contact page shown in figure 12, customers are allowed to enter their enquiries and details so that we can contact them back later to assist them. Our contact details are also shown if they preferred to contact us by themselves.



Figure 11: Store Locations

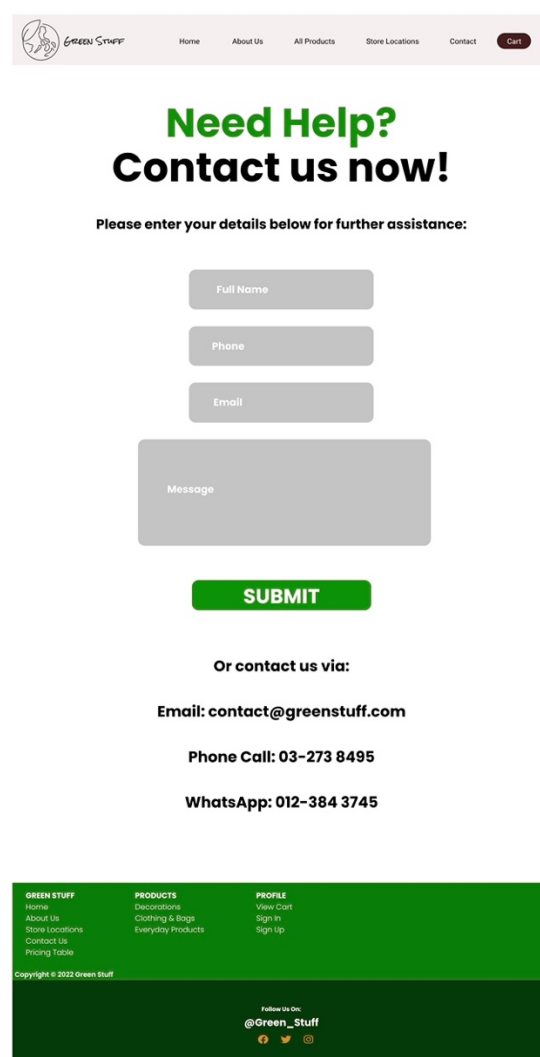


Figure 12: Contact Page