

SOFTENG 350

Assignment 2

High Fidelity Prototype

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Introduction

This report will cover the process of designing and producing the high fidelity prototype **Carbon Tiptope!** for SOFTENG 350. This will go through the design choices and principles I have followed throughout the whole process.

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Navigation bar

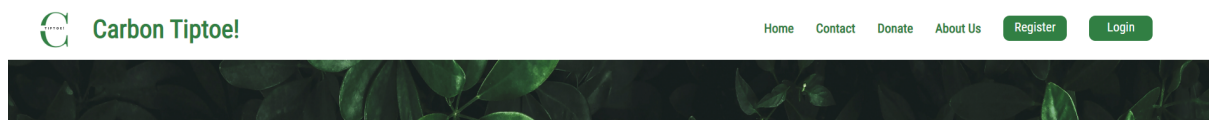


Figure 1: Carbon Tiptoe Navigation Bar

At the entry of the website, a navigation bar can be seen at the top of the page. The navigation bar contains the vital information required for the user; I designed this with **Gestalt's principle of proximity** in mind which helps users identify which buttons are for which functionality. In this case, the left side of the navigation bar has the logo and the right side with buttons allowing the users to sign up and log in.



Figure 2: Facebook Navigation Bar

Another principle I considered when designing the navigation was **consistency and standards**. Figure 2 above shows the navigation bar from Facebook. It can be seen as the logo/home button on the left, and other functionality spread throughout the rest of the navigation bar. Creating a navigation bar that is similar to popular websites makes it easier for new and existing users to navigate throughout the website.

The background colour I used for the navigation bar is #fffff (white), which allows my assigned colour of #317F43 to be emphasised more due to the darker hue underneath the navigation bar from the background image and the lighter colour background ensuring the colour of the buttons in the navigation bar are emphasised. Providing **aesthetic and minimalist design** keeps the content focused on the essentials.

Landing Page/Body

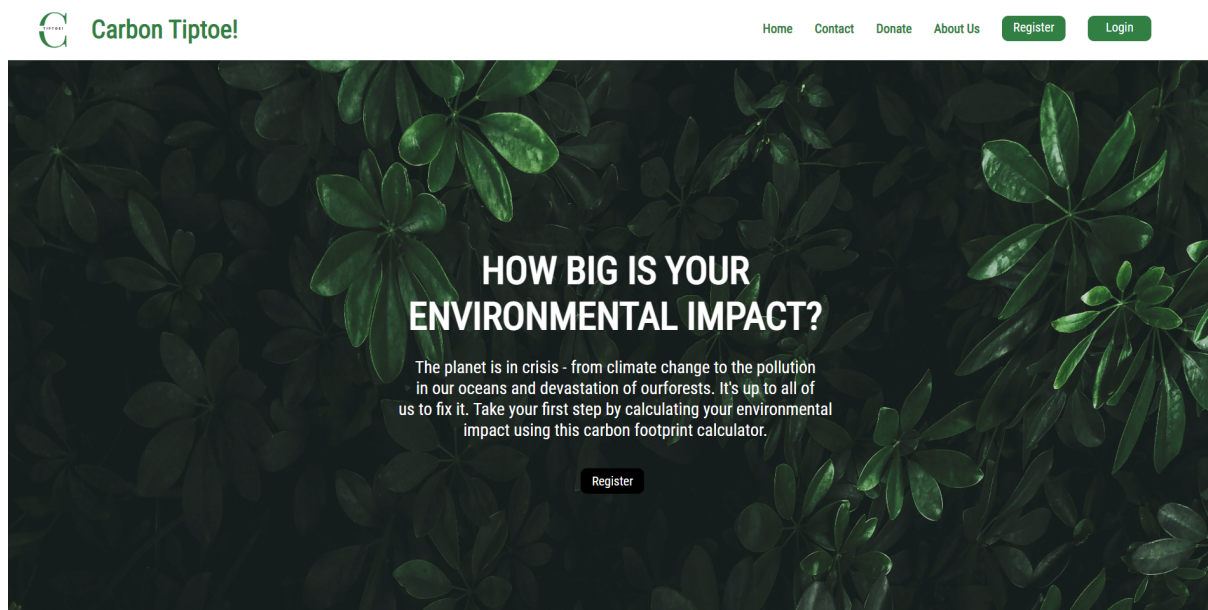


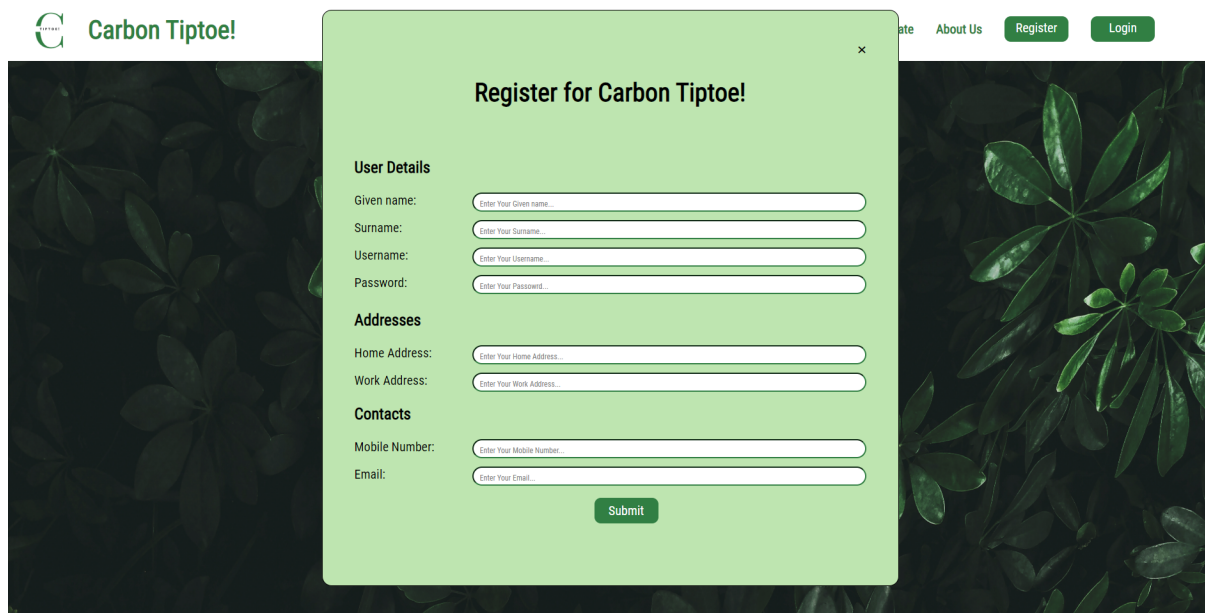
Figure 3: Landing page

The website's landing page consists of a background image, an introductory message, and a registration button. **Aesthetic and minimalist design** has been considered when designing the landing page to ensure the user only consumes the necessary information. It does not interfere with the user's goals of calculating/registering their carbon footprint.

When designing the landing page, I considered the design principles of **balance**, **emphasis** and **symmetry**. The introductory message placed right in the middle of the page emphasises the website's motive and a clear indicator of a register button on both the navigation bar and the landing page.

Another principle I have considered is the **visibility of system status**; when hovering over any of the web page buttons, there is a subtle change in colour to show the user can interact with this button.

Registration Modal



The registration modal is a light green box with a dark green background featuring a leaf pattern. It contains the following sections:

- User Details**
 - Given name:
 - Surname:
 - Username:
 - Password:
- Addresses**
 - Home Address:
 - Work Address:
- Contacts**
 - Mobile Number:
 - Email:

A green **Submit** button is located at the bottom center of the modal. The modal has a close button (X) in the top right corner.

Figure 5: Registration Modal

The registration modal is a pop-up modal triggered when either register button is clicked on the landing page. When the registration modal is pressed, the background is dimmed to provide **emphasis** on the modal. **Accessibility** has also been considered when designing this registration modal. There are input boxes and placeholder text in the field for the user to understand what is required in the registration process.

There is a clear exit button at the top right of the registration modal as **user control and freedom** have been considered allowing the user to exit the current interaction, which is easily discoverable and clearly labelled. An exit symbol has been used due to **consistency and standards** as in other registration websites; they use the same character ✖ (X), which is a clear indication for the user to exit the registration menu.

Cards Section (Journey and Calculator)

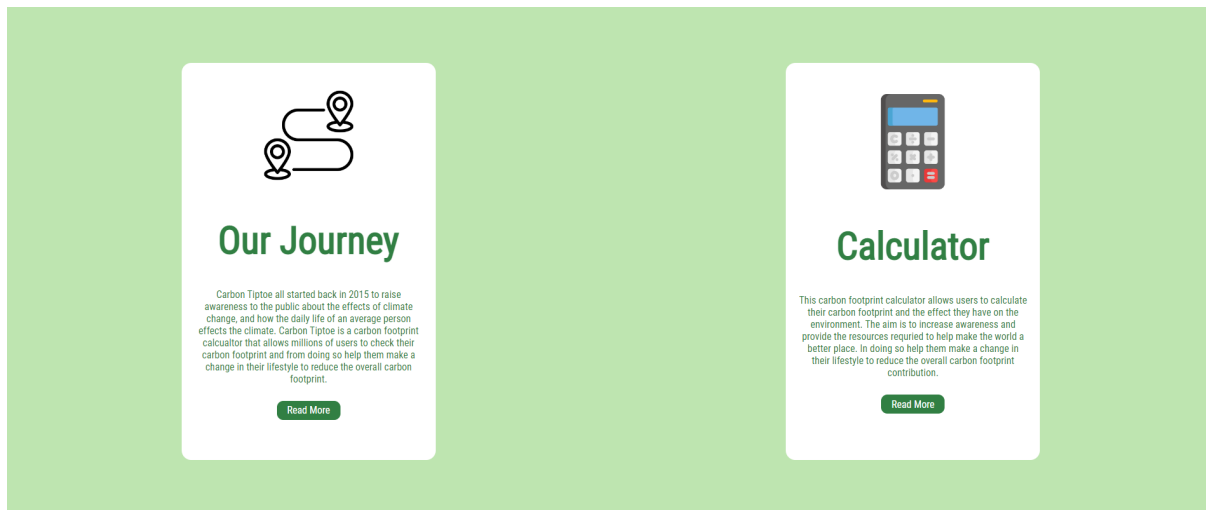


Figure 6: Cards Section (Journey and Calculator)

As the user begins to scroll down, they come across the cards section, which informs the user about the journey of Carbon Tiptoe and the calculator that can be used to calculate their carbon footprint. A lighter shade of the assigned colour has been used #bee5b0. This shade has been used to highlight the darker tone of the assigned colour as the header and text in each of the cards. This provides an **aesthetic and minimalist design** to ensure the user focuses on the two different cards. Gestalt's **common fate** principle has also been considered in the case of describing the journey of the website and then leading the user to calculate their carbon footprint.

Sponsors Section



Figure 7: Sponsors Section

The sponsor's section is minimalistic to allow the users to focus on which sponsors support Carbon Tiptoe. **Accessibility** guidelines have been followed as each of the sponsor images has its own "alt text", which provides a more straightforward understanding for screen viewers. For example, the WWF panda has the alt text "WWF-image", allowing the screen readers to identify which images are placed in which position quickly.

Footer Section

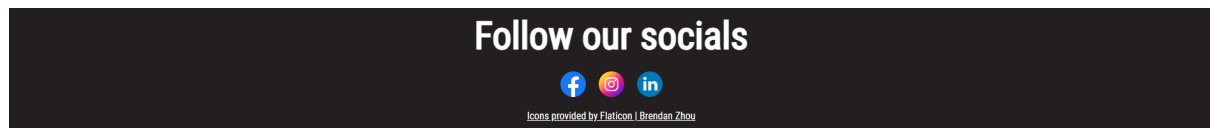


Figure 8: Footer Section

The footer section is designed to be consistent with other footers on popular websites that link to different social media allowing the user to learn more about Carbon Tiptoe. The last line of the footer references the sources that I have used for the images in the website's design as a whole. A contrast ratio of 21:1 has been used to highlight the critical information, including the social media and attributes of Carbon Tiptoe.

Accessibility

The colour theme choices I have used throughout the design process ensure the accessibility requirements to ensure website visual readability. A contrast ratio of 4:1 has been achieved for all text present on the website.

The registration modal ensures keyboard accessibility as using the tab button in each of the input fields allows the user to cycle through the input field without operating a mouse.

Conclusion

In this report, I have discussed the design choices I have made throughout the creation of the home page, registration modal and other additional features. All these design choices and features have been considered to improve the overall user experience.