

High-Fidelity Prototype Report

Color Scheme

The brand color is #E5BE01 (yellow on the logo tab), it is used with complimentary colors of #547BBC (light blue in the background) and #3460AD (dark blue on the navigation bar). Carbon Tiptoe (CT) is an environmental brand, therefore its website should reflect the same theme. The brand color is a saturated yellow which is less commonly used on environmental themes compared to colors like grass green or sky blue. Therefore I used an image of a sunflower found on the internet to hint at the concept of sunlight and plants [1]. This will let users associate the CT website with the concept of environment at first sight. The yellow and dark blue are both saturated and create great contrast, it conveys exciting emotion and grabs users' attention. The background of the sunflower image is plain and less saturated which allows breathing space between the two "heavier" colors. White text is used on dark blue, to maintain a readable contrast of 6.13:1, and black text is used on yellow for contrast of 11.69:1. The complimentary colors also maintain a contrast of 3.41:1, readable for use of large text and graphical objects according to the Web Content Accessibility Guidelines [2].

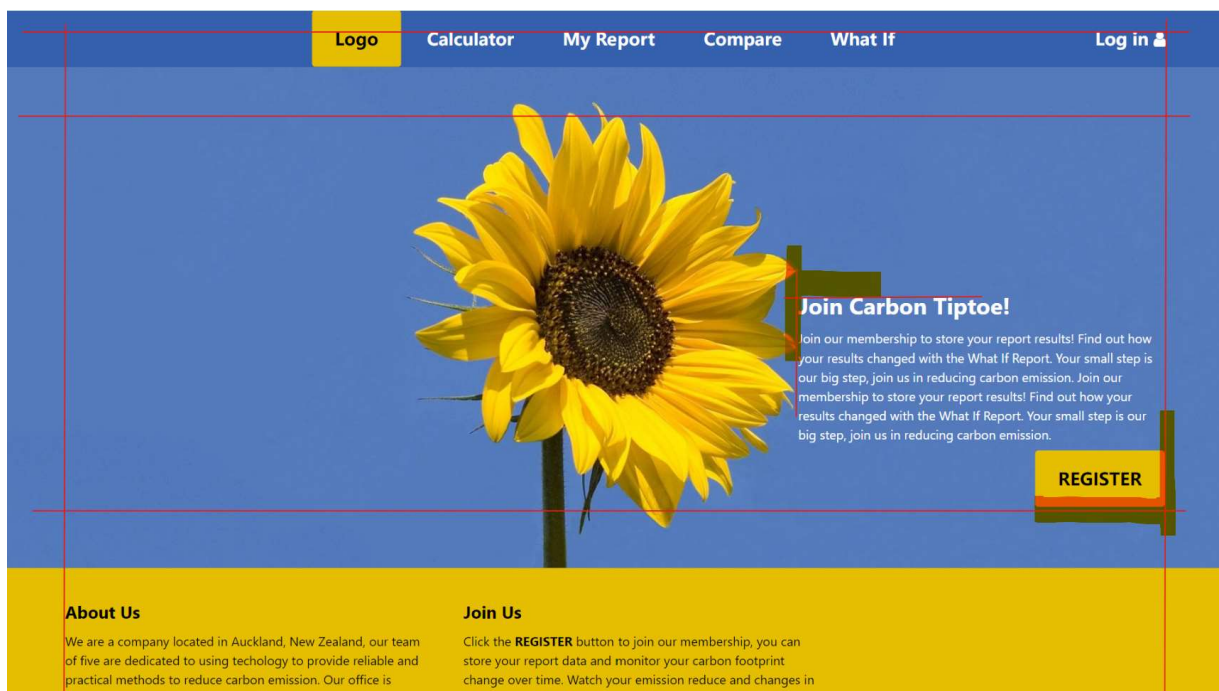


Figure 1. Initial status of home page in 1920x1080 view with annotation.

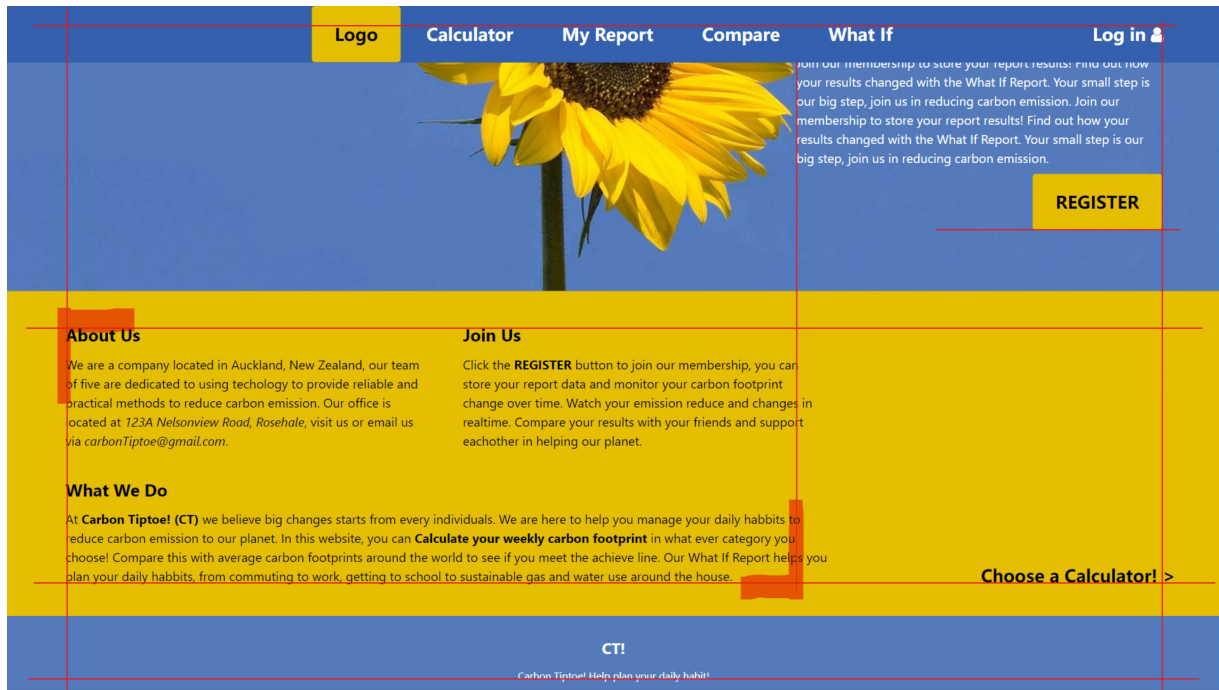


Figure 2. Home page scrolled to the bottom in 1920x1080 view with annotation.

Balance

The home page has an asymmetry but balanced layout (Figure 1 & 2). All three components (navigation bar, image and main text) are full width and the navigation bar and sunflower image are centered, spreading out the visual weight evenly in a horizontal direction. The “REGISTER” button and welcoming text (highlighted in Figure 1) are leaning to the right, this is balanced by the main text section (highlighted in Figure 2), which is 70% width and left aligned.

Although the text in the main text section takes up significantly larger space than the welcome text, this is balanced using graphical components. The “REGISTER” button using a saturated yellow and “Choose a Calculator” link uses bold text, they appear heavier than regular text, both adding weight towards the right. The main text section is less “dense” than the welcome text, because it varies in font size and has breathing space in between.

Looking at this page vertically, we have the saturated blue on top and the equally saturated yellow on the bottom, the two blocky colors are balanced by the lively sunflower and sky image.

The register form is symmetric and balanced (Figure 3.). The popup modal is centered both horizontally and vertically to the browser, equal padding and margin in all directions.

Emphasis

The main page emphasized three functionalities, navigating through the website, registering to CT and introducing the CT brand. First functionality is emphasized using the dark blue navigation bar with yellow hovered tab, which indicates the system status of the current page. It is fixed to the top of the window, its color choice allows it to stand out no matter how far users scroll down. The navigation bar has tab texts that are different in length which may cause errors from misclick as the edge between tabs are not clear. To reduce this, I made space between

each tab, and implemented a color change when they are hovered, this is the use of the surroundedness principle to clarify the position of the tabs.

To prompt users to register, I emphasized the “REGISTER” button by making it capitalized and placing it to the right with the welcoming text, this breaks the centered layout the navigation bar and image has, hence will draw attention to it (highlighted in Figure 1). The welcome text is left aligned while the register button lies parallel to the right edge of the text area, they appear to form a rectangular container and allow them to appear as one figure sitting on the ground (the sunflower image). This is the surroundedness principle to emphasize register function.

Unity

Consistency in layout is kept across the two pages. All buttons and tabs are made bold, *Lato* is the only font used, regular text has a consistent font size of 27px, while title texts vary in size to emphasis sections. Margin and padding in each section are also consistent, the red lines in figure 1 and 2 mark the content of each section. Each section has the same margin width horizontally and vertically, and all sections lie parallel to a vertical line. This is kept consistent even when users scroll down with the navigation bar and popup modal heading fixed in place. All texts are left aligned following the common fate principle, and headings are enlarged to indicate the start of a new section.

User Experience

To provide clear indication between the three sections in the register form, proximity principle is used. Each label and input field pair are closely placed, and each section divided with a break plus a horizontal rule. This is done because a horizontal rule on its own would create empty space the same height as a single input field (see arrows in Figure 3 & 4), which would not achieve obvious separation. Instruction text in each input field tells the user what to enter with examples, this avoids ambiguity in the semantics of the label and expected format. The register form modal is made 50% of the window width, because the input field looks like strips when our eyes aren't focused on it, an input field wider would reduce the functionality of the labels and make the users dizzy (Figure 4 is a counter example).

Minimalistic design is applied to make information readable and learnable while providing enough details. The register form is divided into three sections, namely “*User Details*”, “*Addresses*”, and “*Contacts*”, this information is not shown to users because it doesn't contribute to the form filling process and can cause the layout to be “too heavy” leaning to the left. Every clickable component in the website changes color when hovered, as well as the input fields when selected, this provides system status. Alt text is used in the sunflower image, describing it as “*sunflower under the sky*” to prepare for audio description for visually impaired users. And each clickable component can be reached with just the keyboard. Scrolling is provided for different screen sizes and longer input in the register form. Password input is hidden on screen to protect users' privacy.

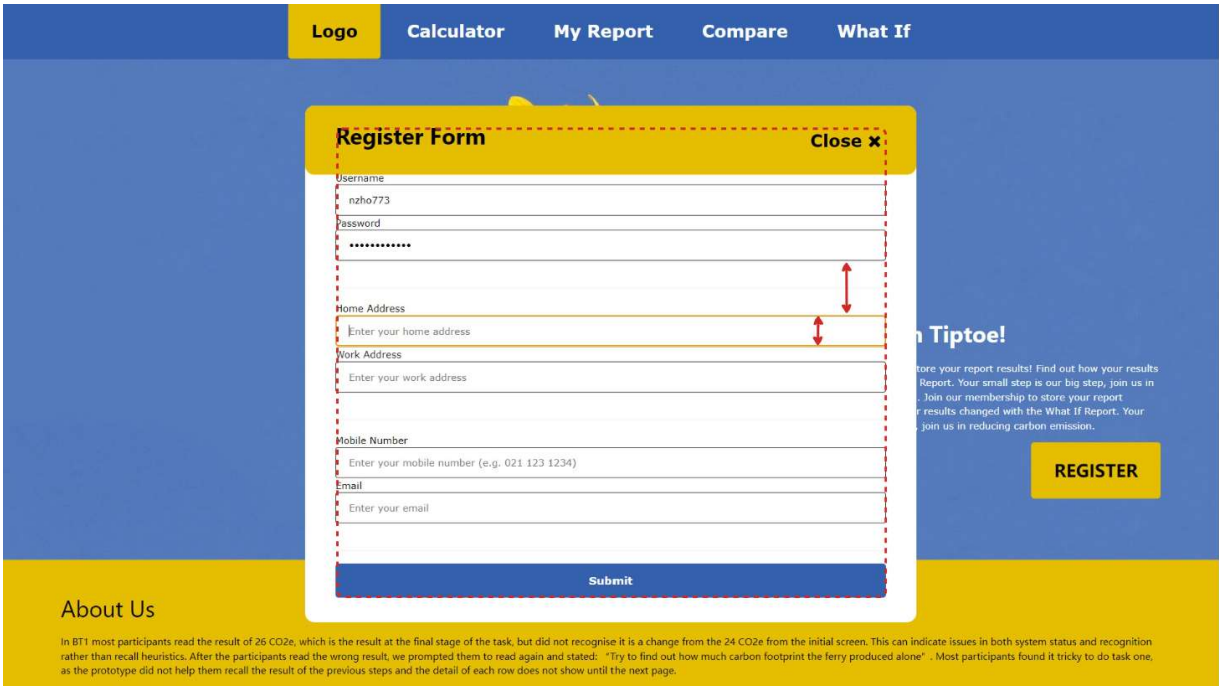


Figure 3. Register form filled up to the 5th field and scrolled to the bottom.

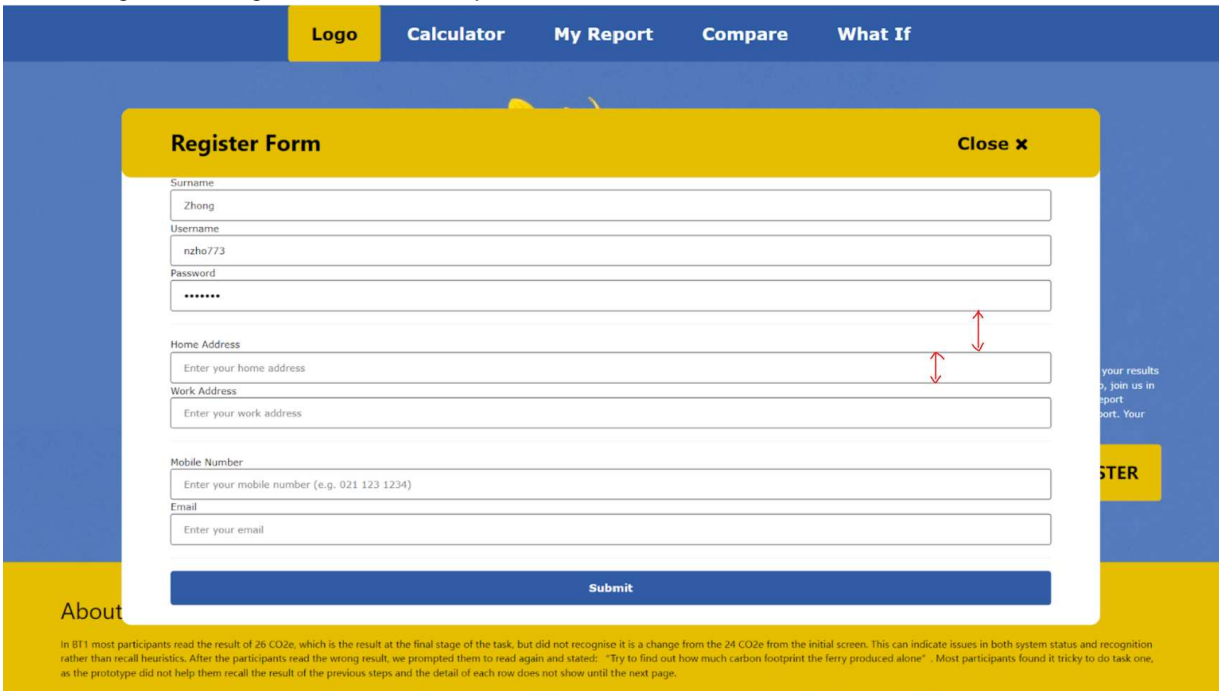


Figure 4. Counter example with wider modal and shorter space between sections.

Reference

- [1] Schepers M. unnamed, digital photograph, available at: <https://pin.it/1j1HcZo>, accessed: 21/05/2022
- [2] WebAIM. Contrast Checker, available at: <https://webaim.org/resources/contrastchecker/>, accessed: 21/05/2022