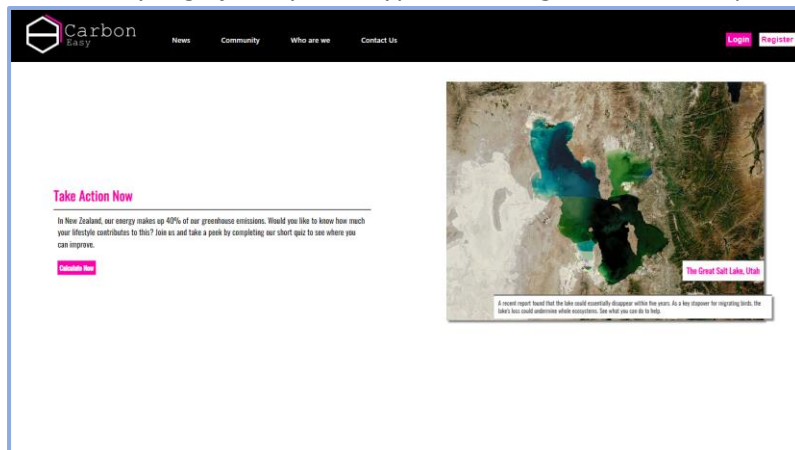


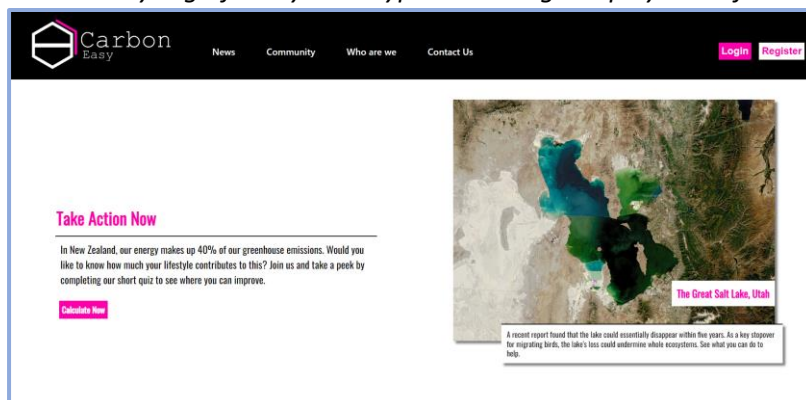
CS345: Human Computer Interaction

Assignment 3 Report

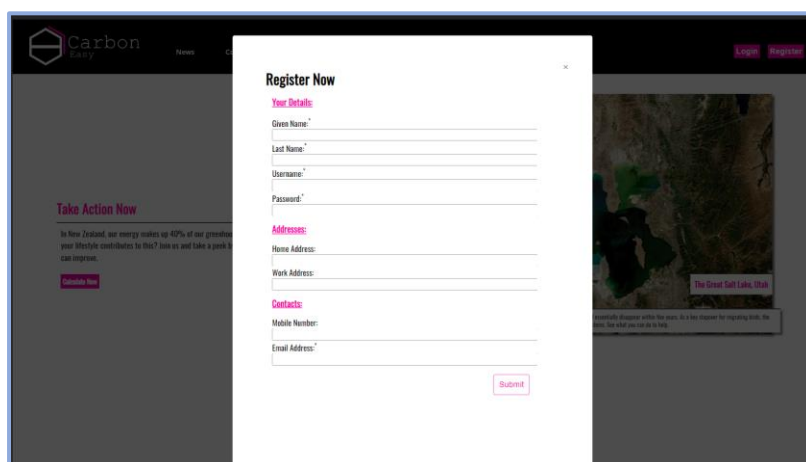
Carbon Easy High-fidelity Prototype: Main Page in 1920x1080px aspect ratio.



Carbon Easy High-fidelity Prototype: Main Page displayed as if on a 14-inch screen.



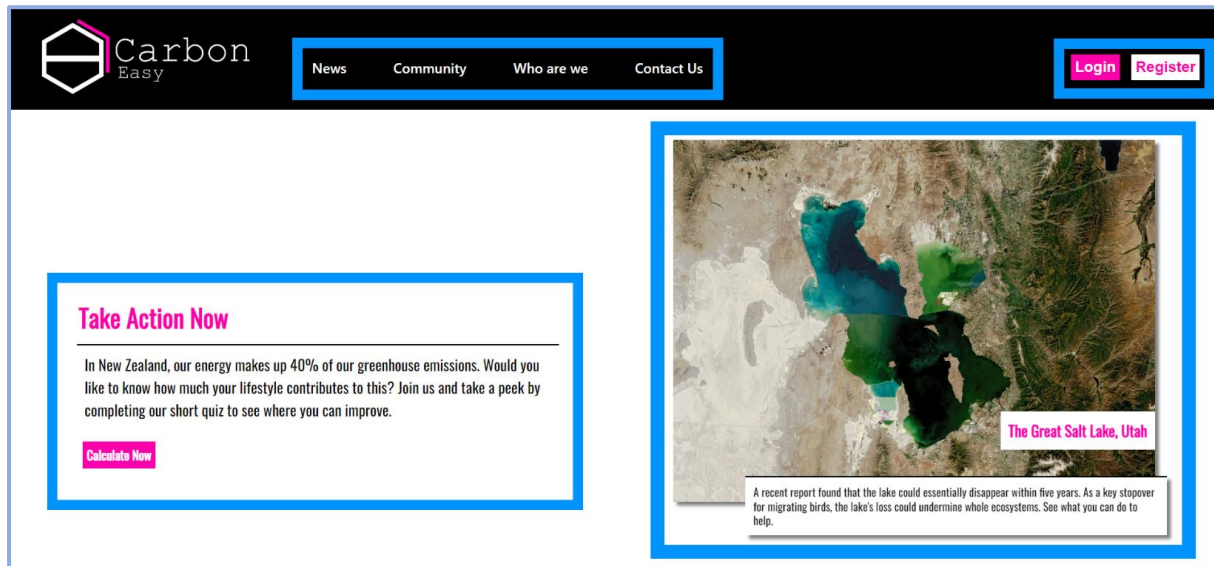
Carbon Easy High-fidelity Prototype: Registration Form



Gestalt Principles

The Proximity Principle:

The Proximity Principle is defined in lectures as “Objects that are close to each other will be seen as belonging together”. Therefore, I made choices that align with this principle. For example, as given by the screenshot below, elements that have relation to one another are grouped together in close proximity to promote the understanding that they belong with one another:



Here, the menu links, the ‘Login’ and ‘Register’ buttons, the ‘Take Action Now’ blurb, and the interactive image (and its context), are placed together in close proximity, showing that their elements have relation to one another. To expand on this, the user would be able to infer that all menu links, for example, have the same purpose in redirecting the user to another page. Similarly, the user would be able to tell that the text below the image has a direct relationship to the image, whereby it explains the context.

The Similarity Principle:

The Similarity Principle is defined as “Objects that have similar visual characteristics, such as size, shape or colour will be seen as a group and therefore related”. An example of where I have utilised this is with button styling. Below are the buttons styled in similar ways, i.e., same background colour and font colour, denoting that they perform similar actions.



Another example of where I have utilized this principle, is the registration form:

Register Now

Your Details:

Given Name:*

Last Name:*

Username:*

Password:*

Addresses:

Home Address:

Work Address:

Contacts:

Mobile Number:

Email Address:*

Submit

Here, every subsection of the registration form share the same style. Thereby, given their similarity, the user is able to infer that they share the same purpose (displaying context for input information). This can also be taken further, where rows of input lines such as “Given Name”, “Last Name”, etc., are displayed in the same way. This, alongside their close proximity to one another, show that they are asking for the same action and information from the user.

The Common Fate Principle:

The Common Fate Principle is defined as “Objects that ‘move’ together (sharing a beginning and/or a direction and/or an end) are seen as related”. This principle has been applied to both the registration form and the menu/navigation links atop the home page. In terms of the registration form, all elements are aligned to the left and ‘move’ to the right, sharing the same beginning and direction. For the top navigation links, all links start from the left and ‘move’ to the right of one another in line.

The Closure Principle:

This principle suggests that we tend to visualize incomplete/fragmented shapes or objects as complete in order to perceive them as whole. I applied this to the registration form overlay, whereby I have implemented a semi-transparent background in order to produce the overlay effect.

Carbon
TALKY

Home

Take Action Now

In New Zealand, our energy makes up 40% of our greenhouse gas emissions. How can we take a step to reduce our carbon footprint?

Register Now

Register Now

Your Details:

Given Name:*

Last Name:*

Username:*

Password:*

Addresses:

Home Address:

Work Address:

Contacts:

Mobile Number:

Email Address:*

Submit

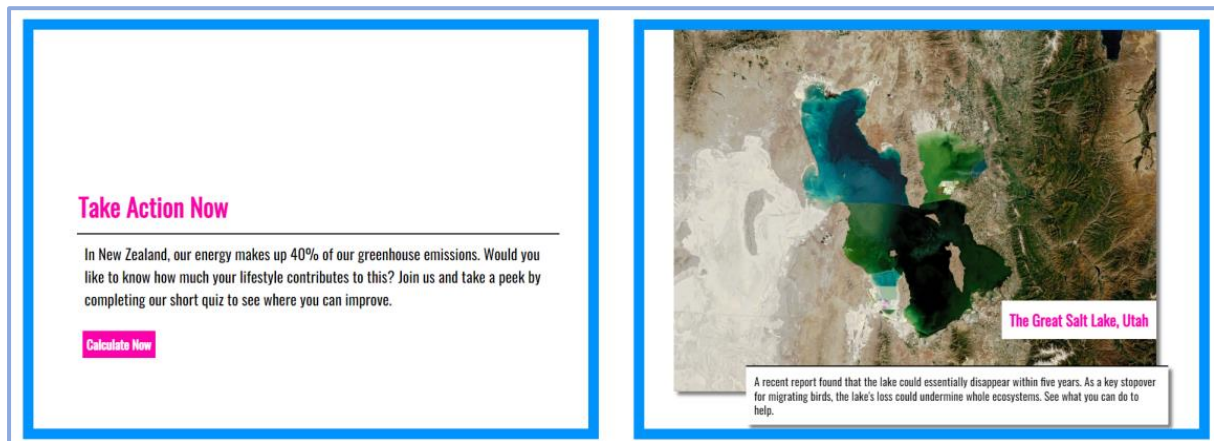
The Great South Lakes Study

The resulting implementation allows the form to be visually separated from the rest of the webpage and provides a contained space for the form. This also allows the user to see the form as a complete, distinct, object instead of just an addition to the main page.

Design Principles

Balance

For this prototype, I had decided to implement an informal balance in order to achieve visual equilibrium.



As you can see in the screenshot above, I achieve a balance in the main page content by distributing the main text and image, two fundamentally different objects, evenly. While they are not exactly symmetrical, they share similar weight in order to maintain equilibrium between either side of the web page. By making the text on the left larger than the text on the right, the weight becomes more even as the right side has a higher weight due to the large image.

Emphasis

Emphasis aims to draw user attention with easily recognisable focus. I have primarily done this by utilising white space. Also using the above screen shot, white space helps in distinguishing the two main containers from one another, acting as a visual rest from either of the elements. The white space therefore emphasizes both elements, drawing the user's attention to either of them. This also applies to the top navigation bar, as this is visually different to all elements with its black background creating a clear contrast with the white, therefore emphasizing its design too.

This same thought can be applied to the registration form, where the solid white registration form atop the semi-transparent/dark background emphasizes the form as an interesting object, drawing the users focus and attention to it.

Unity

Unity within this prototype is primarily used within visual style choices. For example, titles (outlined in blue in the screenshot below) have a consistent font and colour to maintain unity in design.

Take Action Now

In New Zealand, our energy makes up 40% of our greenhouse emissions. Would you like to know how much your lifestyle contributes to this? Join us and take a peek by completing our short quiz to see where you can improve.

Calculate Now

The Great Salt Lake, Utah

A recent report found that the lake could essentially disappear within five years. As a key stopover for migrating birds, the lake's loss could undermine whole ecosystems. See what you can do to help.

Your Details:

Given Name: *

Last Name: *

Username: *

Password: *

Addresses:

Home Address: *

Work Address: *

Contacts:

Mobile Number: *

Email Address: *

This is also applicable to base text (outlined in green), sharing the same font and colour as well as relative size. As the two are visually different, a visual hierarchy is maintained where the title is obviously of higher interest/importance, being used more for organising information.

Colour Scheme

For the colour scheme, I have chosen to incorporate black and white alongside my prescribed colour. The effect of this allows for me to successfully utilize the 80/20 rule, where majority of the page is either black or white (thereby making the 80), and my prescribed pink colour is used throughout the more essential titles and buttons (making the 20). This pink is also used as a main hover colour for certain text such as the top navigational links and buttons, which allow the user to understand the interactivity and importance of select elements.

In terms of contrasting, my main body text (black) atop a white background follows a contrast ratio of 21:1. The same with the top navigational links (white) and the black background. For title texts, I had opted for a pink (prescribed) colour atop a white background, sized larger than most texts, which meets AA(4.5:1). The same is true with the button colour scheme too.

Font sizes are also maintained at a readable size, regardless of device size. This is demonstrated with the differences in aspect ratios, where in either case the text is still readable, as per the assignment guidelines.