

## **Report. High Fidelity Prototype**

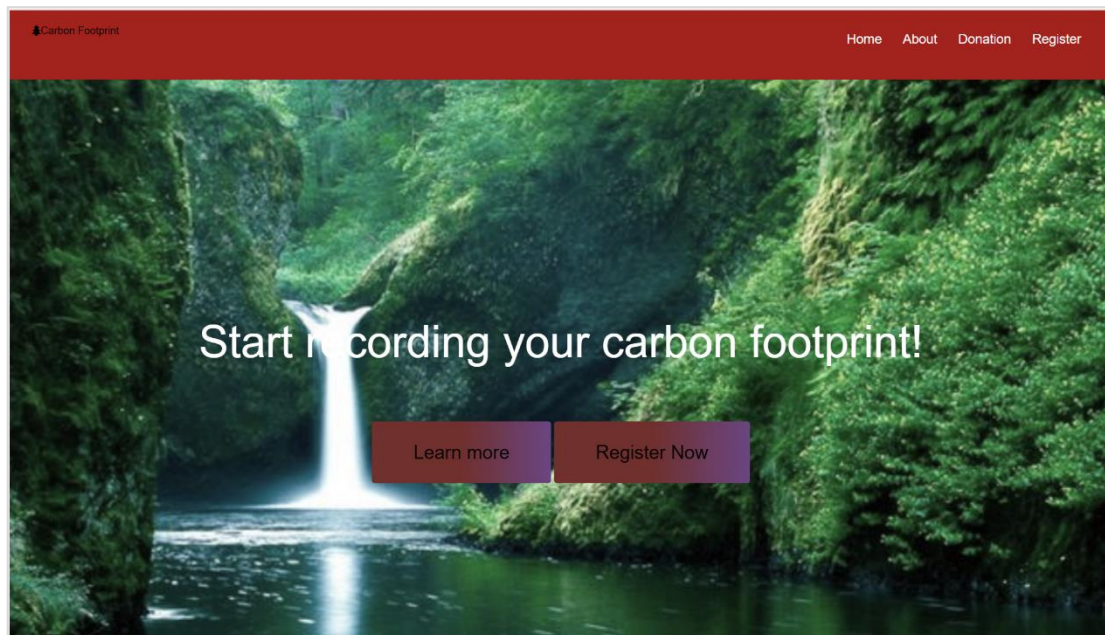
### ***Scenario and the “User Needs”***

I imagined a scenario where the user would need to see the sign-up button clearly in one interaction, and the sign-up function would be able to quickly navigate the sign-up page. Therefore, our high-fidelity prototype focuses on the following user needs:

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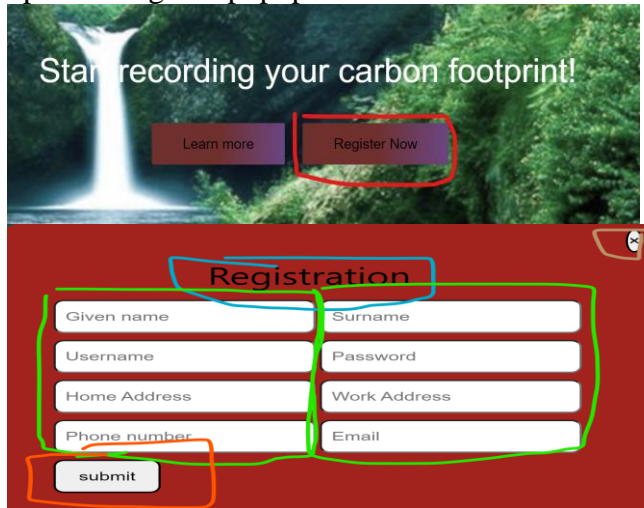
- Ability to click.
- Ability to direct user to registration page.
- Ability to see different input in registration form.
- Ability to browse all sections in the home page.
- Ability to represent the route of different functions.

All these user needs have been showed for in our prototype will be detailed below.



I designed the Home page byte is not more than 50K, because the page design should be beautiful, generous, concise as the principle, to maintain a consistent style. In order to achieve the best visual performance effect, we should pay attention to the rationality of the overall layout, so that visitors have a smooth visual experience. The primary function of a web page is to provide a form for every web user to understand the information provided by the web site. To study web design, you need to look at it from the user's point of view. Users are the key to a website's success or failure. If the user spends too much time accessing the site, there is a good chance that he or she will shut it down immediately, or that the user will leave the site as soon as the site becomes inconvenient, which is a failure of the site design and will only leave the user disappointed. So the size of the web page, including images, should not exceed 50K. The user clicks the Register button to launch the JS function and

open the register popup. The user clicks the cross in the upper right corner to close the modal.



The overall style of the homepage:

1. The logo should be placed in the most prominent position of the homepage as much as possible. 2. Highlight a particular color (#A2231D) 3. Use the same effect for the same type of image 4. The main home page has two keys, one is to learn more, the other is the registration button, click the registration button can lead to the registration page. 5. The home page follows the simple design concept, introducing the place in the form of cards to show the home page theme. 6. The Footer area is designed with an up button for users to quickly return to the top. 7. Navigation bar set home, donation, registration and about several keys, greatly improving the convenience of the web page. 8. The home page sets the time display function so that the time can be displayed at the bottom.

### ***Why this prototype is appropriate for student coursework***

Nowadays, websites involve many digital resources and files, from lecture slides to Jupyter notebooks used in lectures to files used in assignments.

A key factor for success is the quick and concise registration and web browsing information. Our system provides a quick way to browse.

Finally, since the registry is only shared with the database, it ensures data integrity, which is critical for these types of website designs.

### ***Visual Design Choices***

A variety of design principles have been considered for the implementation of the high-fidelity prototype. Three ***Gestalt principles*** have been used in the prototype, such as the Proximity, Common Fate, and Closure principles.

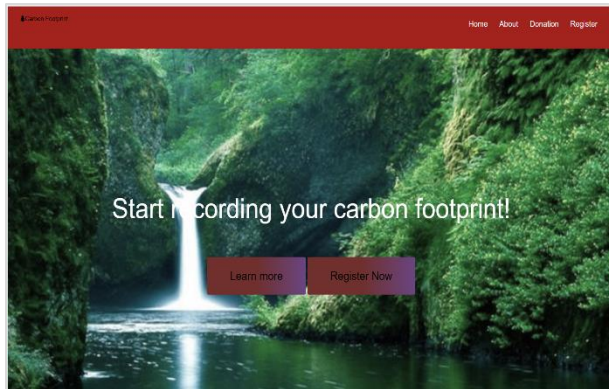


Figure 10.

Two out of the three **design principles** have been used, such as Balance and Emphasis.

Balance's design principles are illustrated by the 4 items in Figure 10. Four different project blocks are displayed symmetrically with 2 blocks on each side to create harmony and balance. The registration popup also exhibits balance, albeit not in a symmetrical way.

High-fidelity prototypes use minimal colors like red and gray to make web pages look clean. To add color, different shades of green were added to provide a monochromatic color scheme for high-fidelity prototypes (as shown in Figure 10). Red was chosen because it creates relief and relaxation for the user's eyes, it provides a contrast to the white background without overwhelming the user.

High-fidelity prototypes have icons that help users when deciding to interact with shared icons. It acts as a visual indicator of which button the user must click to perform a specific task in the system.

## Part 2. Usage Experience

### *Part 2.1 Test protocol*

The target users of my test protocol were college students, who were the best users for our redesign because they often had coursework and would use shared resources multiple times for group projects. Our group will test three college student participants. Participants were asked to think aloud.

From our usage research data, we can define the main UX goals for our web interface, including: First, make it easy for users to recognize that the interface is similar to a blog or email for sign-ups and donations. Second, fast learning for new users, as they are familiar with the design, as it is similar to other website services they already use, such as google drive. Third, because of its ease of use and efficiency, students are more satisfied with its use because they can easily sign up.

### *Part 2.2 Usage Testing results*

The target users for our interface are university students, they are the users who will be best suited for our redesign as they regularly have courseworks and involve multiple use of sharing resources for group projects. Please see chart below for the usability tasks and raw data observations from the usage testing. From these data we can also present some quantitative results.

Work Role: User Class	UX Goal	UX Measure	Measuring Instrument	UX Metric	Baseline Level	Target Level	Observed Results	Meet Target?
Student: Casual new user, for regular coursework use	Users recognize or be familiarized that the interface is used for sharing different type of files like Google Drive or Dropbox	Initial user performance	User exploring the homepage section of the website interface	Frequency of help	1	< 1	1	No
Student: Casual new user, for regular coursework use	New users can easily learn and adapt to the interface, ease of use	Initial user performance	Easily finding where the sign up and send buttons are located.	Average time on task	<5	< 5 seconds	Around 2 to 3 seconds	Yes
Student: Casual new user, for regular coursework use	High student satisfaction	First impression	Layout	Average rating across users and across form questions	B	Grade B to C (A being the highest and F for fail)	B	Yes
Student: Casual new user, for regular coursework use	Low error rate for sharing and sending files	Initial user performance	Register	Average number of repetitions of failed commands	0	<1	0	Yes

***Reference:***

<https://www.nature.org/en-us/>  
[www.w3schools.com/w3css/w3css\\_templates.asp](http://www.w3schools.com/w3css/w3css_templates.asp)