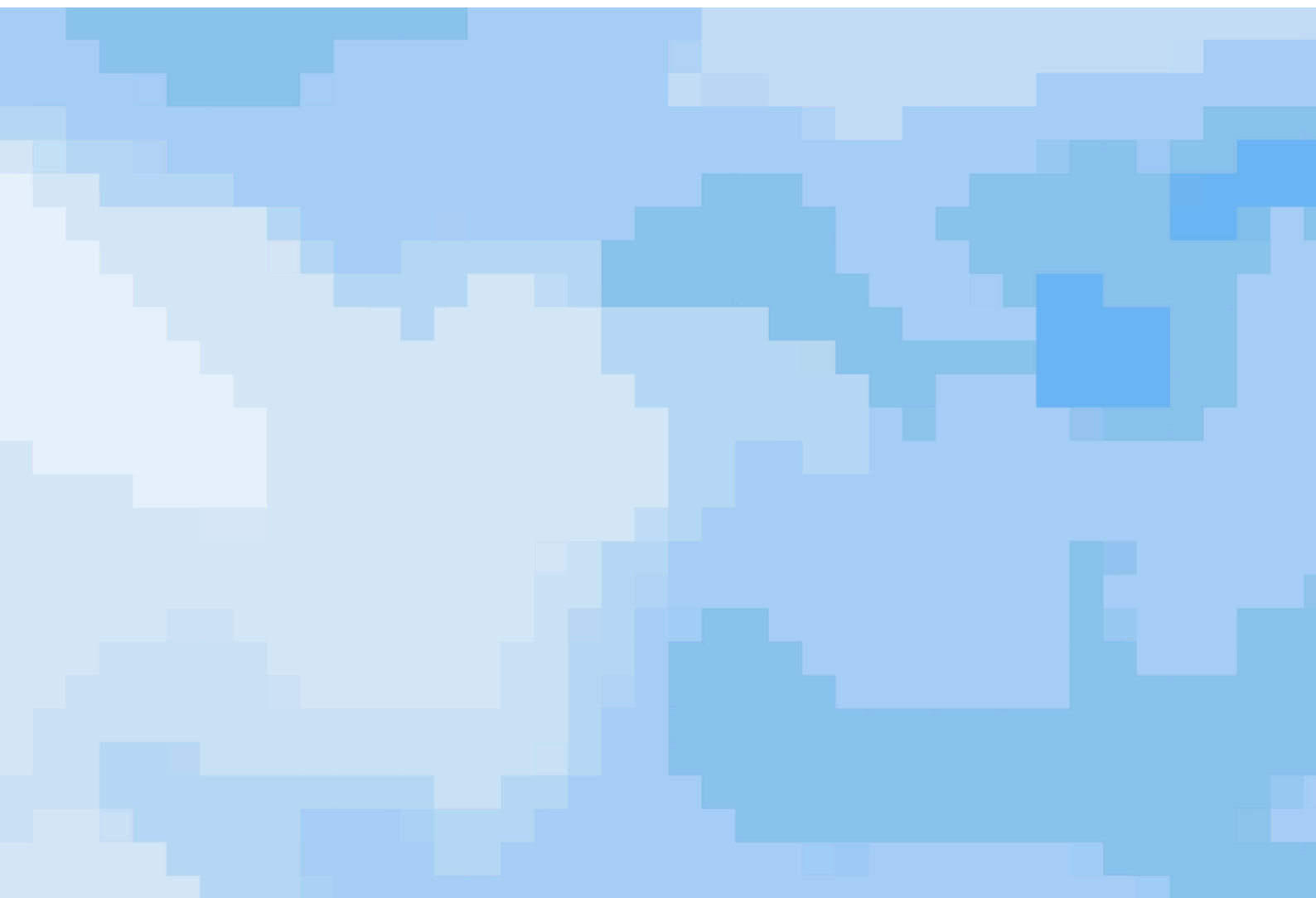




Sprint 1 Reflection Document

Group: JARS with an E

Project: Napoelon's Adventures



What's Included in the Prototype:

So far, the prototype has all the functions required in order to have a functioning website with two minigames implemented to support them.

The website currently has:

- landing page
- login page
- signup page
- password reset page
- map page
- game page
- profile page
- account deletion page
- leaderboard page
- logout page

(note: There are screenshots of each page in the "UI folder" of "Product documents")

The landing page is the main page that the user should be directed to once opening the link to the website, which includes the titles of the project, "Napoleon's Adventure", as well as the logo used for this project. The landing page will also have a ***login and sign up*** clickable hyper-links, which leads them to their corresponding pages.

The signup page is a simple page on which a user can create an account for the website, this signup page will include four boxes to be filled by them.

These boxes include:

- "Name" on which the user will input their username they wish to have.
- "Email address" on which the user has to input a valid email that can be used to hold the username, as well as giving them an option to reset their password if they have forgotten it.
- "Password" on which will include the password the user wants to have for their account, under conditions that make the password hard to be attacked from a brute force attempt.
- "Confirm password" on which the user must input the same password to make sure it is typed as they wish.

Once all those boxes are filled, the user clicks the "Sign up" option to lead them to the ***Login Page***.

The Login Page has two boxes for the user to fill correctly in order to be directed to the **map page**, these boxes being:

- “Username”, which should be the user’s username.
- “Password”, which should be the user’s password.

If the user inputs the correct username and password, they will be redirected, however if the user is unable to input the correct password, or have forgotten it, they are able to click on the “Reset here” option, which will redirect them to the **password reset page**.

The Password Reset Page has a single box labeled “Email Address”, which the user will put their email and receive a reset password link, the page has a description that explains to the user that an email will be sent explaining what to do. Once the user inputs their email and clicks on the “SUBMIT” it will direct to a page telling them the email was sent, and a hyperlink that will return them to the **login page**.

The Map Page includes a mini-map which currently has 3 points, which act as locations that the user can go to in order to play one of the few minigames, in order to access those locations, the user will have to go to certain locations in the Streatham campus, scan **a QR code**. Those three points being:

- “Sports Park”, which is currently still under construction (TBD).
- “INTO Building”, which takes the user to the “Match 3” game.
- “Cornwall House”, which takes the user to the “Recycle Rush” game.

The QR code is a scannable code that will give the user the “secret code” that will allow the player to play the game of the certain location that the QR code is located in, giving the motivation for a person to play a sustainable place in a place in the university.

The Game Pages (currently Match 3 and Recycle Rush) include a page with the description of the game, how to play the game, as well as how it tackles sustainability. Each one of the descriptions give a few sentences describing the matter. There are two links, one to play the game (which is currently disabled as the game was not hyperlinked) and another that returns the user back to the map.

Match 3, is a game on which a player has a 7x7 grid that has a scatter of different items where the player has to match 3 of the same type of recyclable items in order to remove it from the board. Once this has been completed, more items spawn with the entire goal being

to reach a certain number of points. There is rubbish that can't be recycled, and needs to be removed with an ability that is received after every few successful combos. There is also a feature that gives a material special effects, matching that material would result to more points to the player.

Recycle Rush, is a game where players catch recyclable items falling from the sky that takes place at Cornwall house. The premise of the game is to push the idea that the items need to be placed in the correct bin to make a sustainable move. The game has 4 different bins to alternate from with each having their own recyclable item. When the player places the correct item in the right bin, they earn a point. However, if they miss the item, or place it in the wrong bin, they do not gain a point, and then lose a life in return.

The Profile Page is where a user can see their profile, with their username on the top of the page, under that they will have their profile picture (which can't currently be uploaded), it will also have their username and email, which they can change with an edit, and will only go through if it is a valid email or name. There are two clickable buttons in this page, one being the "save changes" where a user saves the changes they have done to their name and/or email. The other button is "Delete Account", where once clicked it will lead them to the **account deletion page**.

The Account Deletion page is a simple page that display a message that asks if the user is sure whether they want to delete their account, and two buttons in the page, one being to confirm their selection by clicking the "delete account" button, the other being "go back" where they go back to the **profile page**.

The Leaderboard page is a page that is currently under construction, the plan for it is to have the leaderboard of all the games to see who has the highest scores, this could make the gamification aspect better for the game and allow people to play a game more to achieve the high score, it can also lead them to share the website to other people, spreading the message about sustainability.

The Logout Page is the final page in the website, once it is clicked from the **map page**, it will log out the player from their account where they will have a button that saying "login again" that will lead them back to the **login page**.

Assumptions and Decisions made in the Prototype Development:

- We have assumed that:
 - The aesthetics design phase should be completed in the second sprint, as the main idea for the prototype is to have a working code that shows the main functionality of our website.
 - 2 minigames that represent a certain location in the Streatham campus would show the best results for the website, because it would relate to the students and send the idea of sustainability in different ways.
 - Dividing some of the work into equal groups to do different tasks (frontend/backend) would suffice to the best outcome overall.
 - This will be a hard thing to achieve as our first group project over the count of two people.
 - Napoleon will be a nice idea to use for our project, because many people like him and would be motivated to play a game dedicated to him.
 - The prototype should run on the desktop as the main part, with the mobile implementation to be done in the second sprint.
- We Have decided that:
 - Getting the product to be developed in a working matter was the most important thing to deliver, getting the main pages ready, with the least possible aesthetics design for the page
 - The minigames have been made to the Cornwall house and also the INTO building, each minigame having different aspects that have different goals to win, having the same final goal of spreading the idea of sustainability.
 - Split into sub teams, having one do the frontend for the Django version of the website, and other team to do the backend. Later on, moving the teams again and split it for the 2 different games, and other pages in the website.
 - Continue with the idea of the Napoleon to be the mascot of the website.
 - The website will run on the desktop, meaning that the whole website will work on the desktop, but not on the phone.

Known issues or areas of improvement for next sprints:

- Known issues:
 - In the “Recycle Rush” game, there seems to be an issue on which some of the rubbish can bug through the bins, making the player lose a life, and miss out on a point.
 - There is no email confirmation while signing up.
 - Multiple usernames can be made with the same email, which causes an error when resetting the password for, also not as secure.
 - There is no way of adding a profile picture to a user’s profile.
 - No place where the QR code is currently visible for public.

- Areas of Improvements:
 - The website could have better design in terms of aesthetics, with more attracting visuals.
 - The games are not loading into the webpage, that is because it has to be downloaded, meaning that there might be another language needed to be used for the games, maybe a language like Javascript.
 - There can be a better map, which shows the university in a better way.
 - More games, having only two is not enough for a full product.
 - Better way of understanding the specification as a team.
 - A more nailed down schedule on meetups, in order to catch up with work and see what is to be done next.
 - Separate the group to work on features, rather than backend and frontend
 - When using GitHub, create branch per feature instead of per person.
 - Better delegation of tasks with group members (being more dynamic with task allocation, more understanding on how long a task would take)
 - The email for when you reset your password may go to Junk (depending on the email provider you use), it would be ideal if it does not do that.