Volunteer Organisation Management Website Design

WDC - UG Group 22

Based on the research conducted earlier, as well as the task description, the following design of the website has been developed.

Key Functionality of the Website

The key functions of the website were identified as below:

Visitors to the website should be able to (without creating an account):

- View public news/updates from the branches of the organisation.
- View public events from the branches of the organisation.
- Register to become a member of the volunteer organisation.
- View general information about the volunteer organisation.

Members of the volunteer organisation should be able to:

- View news/updates from the branches of the volunteer organisation.
 - o Public news from all branches.
 - o Private news from branches that they are a member of.
- View upcoming events from the branches of the organisation.
 - o Public news from all branches.
 - o Private news from branches that they are a member of.
- RSVP to upcoming events.
 - o Indicate yes or no to attendance of the event.
 - o Edit there RSVP if they change their mind.
- Join different branches of the volunteer organisation.
 - o A member may be a member of multiple branches of the organisation.

Branch managers should be able to:

- Post news/updates for the branch they manage, both publicly and privately.
 - Also edit existing posts.
- View and manage members of their branch.
 - o View a member's contact information.
 - o Remove a member from the branch.
- Manage events for their branch.
 - o Create new events.
 - Edit existing events.
 - o Delete events.
- View RSVP responses for events.

System admins should be able to:

- Manage members of the volunteer organisation.

- o Update their information (name, address, etc).
- o Delete member accounts.
- Manage branches of the volunteer organisation.
 - o Create new branches.
 - o Assign branch managers.
 - Edit/delete existing branches.
 - o All actions of a branch manager.
- Sign up other administrators.

To support the above core functionality of the website, the following supporting/supplementary features will be present:

- A login system:
 - Allows for login with a username and password.
 - o Alternatively allows users to link a social media or other account.
- Email notifications:
 - o Notification when a new event is posted to a branch the user is a member of.
 - o Notification when an event a user has RSVPed to is updated.
- User information management:
 - User should be able to update their details, such as name, address and phone number.
 - o Users should be able to update their notification settings preferences,

Pages of the Website

From the research it was clear that a sensible page structure of the website is crucial to ensure a positive user experience. The pages that will be present on the website and their purpose/function are outlined below:

- Home Page
 - View basic information about organisation.
 - View some of the latest news/updates from the organisation.
- Events Page
 - o Search for upcoming (or past) events.
 - o View brief detail about the events.
 - o Link to event details page for each search result.
 - Allow users to RSVP yes or no to events.
- Event Detail Page
 - View all details about an event.
 - o Allow users to RSVP yes or no to the event.
- News Page
 - Allow users to find/view recent news/updates from the organisation.
 - Allow users to search for news/updates.
 - Link to the separate page for each news/update.
- News Details Page
 - o View the full content of a singular news/update.
- Branches Page

- o Display all branches of the volunteer organisation.
- o Link to specific branch pages.
- Branch Details Page
 - Show all details of a specific branch.
 - o Allow members to join the branch.
- Login/Registration Page
 - o Allow members to login to their account.
 - o Allow visitors to create an account.
- My Upcoming Events Page
 - o Allows a user to view a list of the events they have RSVPed yes to.
- User Settings Page
 - o Allow members to update their personal information.
 - o Allow members to update their notification preferences.

Additional pages will be available to branch managers and system administrators to allow for them to perform their management functions.

The pages that will be available to branch managers are:

- Create Event
- Edit Event
- View Event RSVP Responses
- Create News
- Edit News
- View Branch Members
 - o View list of all members.
 - o View information about a specific member (contact details, etc).
- Edit Branch Information
 - o Description
 - Contact Details
 - Address

Pages that will be available to system administrators are:

- Create new branch.
- Add a branch manager.
- Edit/delete member.
- Sign up other administrators.

This page structure ensures that the pages a user is most likely to frequently access are easily available through the nav bar at the top of the page, or through links from the home page. This reduces the cognitive load on the users of the website, by logically grouping related actions together.

Website Design

The design of each of the core pages can be seen in the following sections.

Home Page

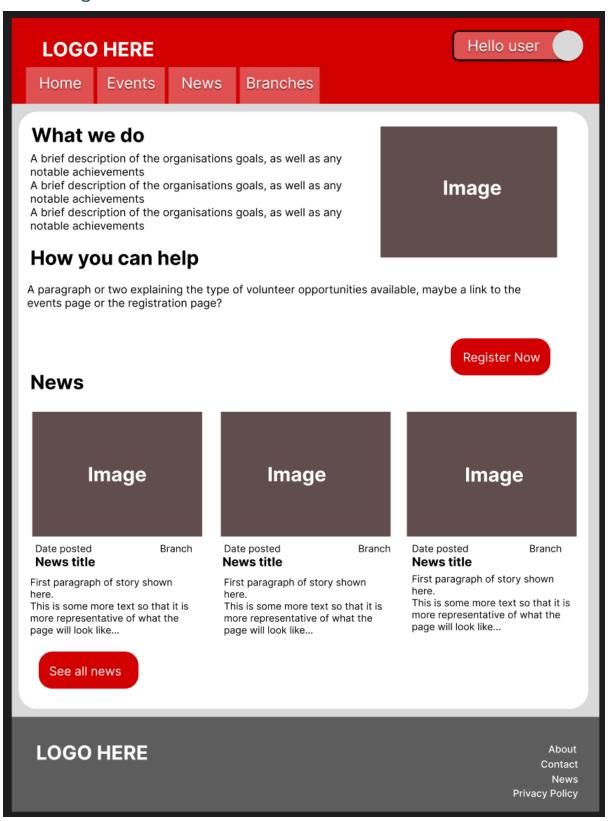


Figure 1: Home Page

The home page can be seen above, It contains a navigation bar at the top of the page with links to the key pages including the events, news, and branches pages.

The navigation bar also includes a button (which is the user's profile picture) to allow the users to sign in and out, as well as access a menu to update their personal details, notification preferences, and see the events they have RSVPed yes to.

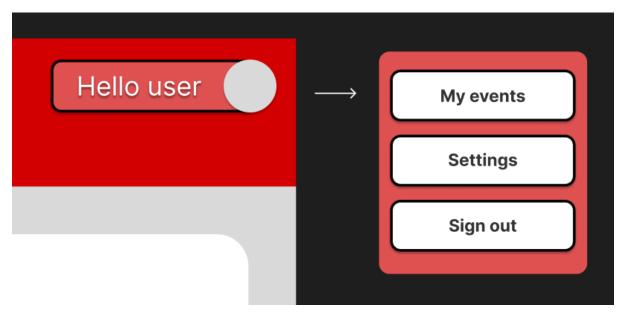


Figure 2: Menu that appears when user clicks their profile picture in the top right corner.

These options were placed in the top right corner, as this is a very standard location for these type of options in many websites, so placing them here reduces the cognitive load on the users as they do not have to look for these options.

The front page includes a selection of the latest news stories from the volunteer organisation. These news stories scroll horizontally, to allow for more stories to be viewed, without taking up too much space on the home screen. There is a clear button present to see more news, which will take the user to the news page.

There is also a button to register now, which will link to the registration page. Placing this button prominently on the front page means that new members can very easily find this button. It is important to make things simple for these new users, as they are likely unfamiliar with the website layout.

Events Page

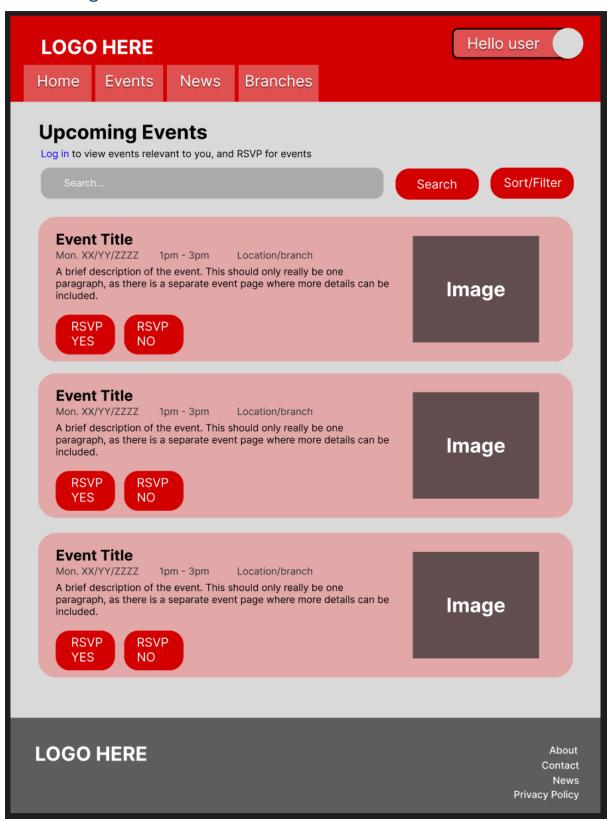


Figure 3: Events Page

The events page displays upcoming events. It features a search bar at the top, with a button to expand a list of filters which can be applied to the search.

Each event within the search results is displayed in its own div, with the event title at the top. Key event details such as the time, date and location are displayed under the event title. A brief paragraph about the event is also present, with an event image on the right.

Two buttons are present at the bottom of the div, which allow the user to either RSVP yes or no. If a user is not signed in, these buttons redirect them to the login page. Once a user has RSVPed for an event, these two buttons will be replaced with one button showing their response, i.e. I'm attending, or not attending. Clicking on this button allows users to edit their response by displaying the two original RSVP yes or no buttons again.

For branch managers (and system administrators), two additional buttons are present next to the RSVP buttons to allow them to edit the event, or view the responses of members.

Event Detail Page

For each event, there is a page which displays all the details of the event. The design of the event detail page can be seen in Figure 4.

The page has a sidebar on the right displaying key details of the event including date, time and location. It also has a counter for the number of people attending, as well as buttons to RSVP yes or no. These buttons behave similarly to the button on the events page when pressed.

In the main column on the left, the event title and description (from the events search page) is displayed, as well as more details in the form of dot points.

The event image is also displayed underneath these dot points.

For managers and system administrators, two additional buttons are displayed underneath the RSVP buttons for editing the event and viewing the responses.

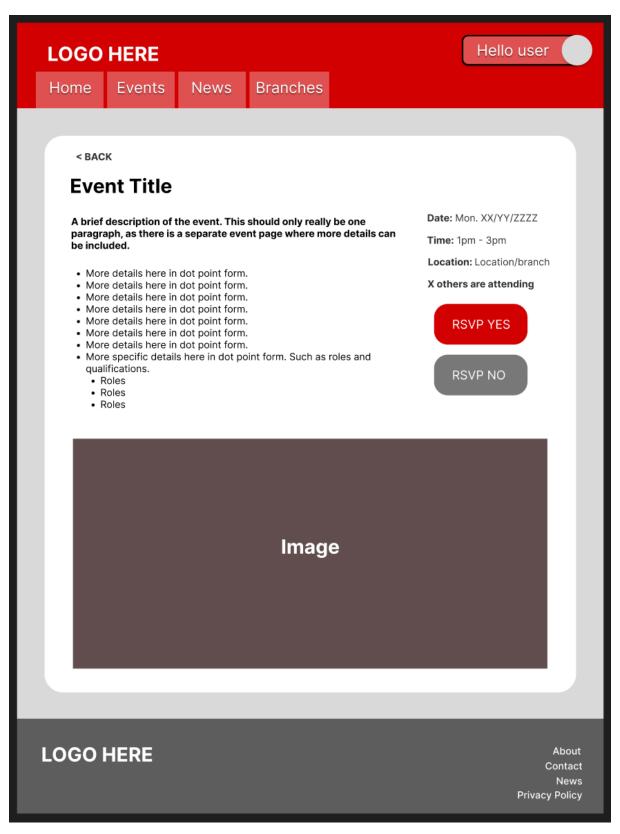


Figure 4: Event Detail Page

News Page

The news page can be seen below, it has very similar features as the events page, with the only notable change being the lack of the buttons to RSVP. For managers a button appears in the similar location to edit the post.

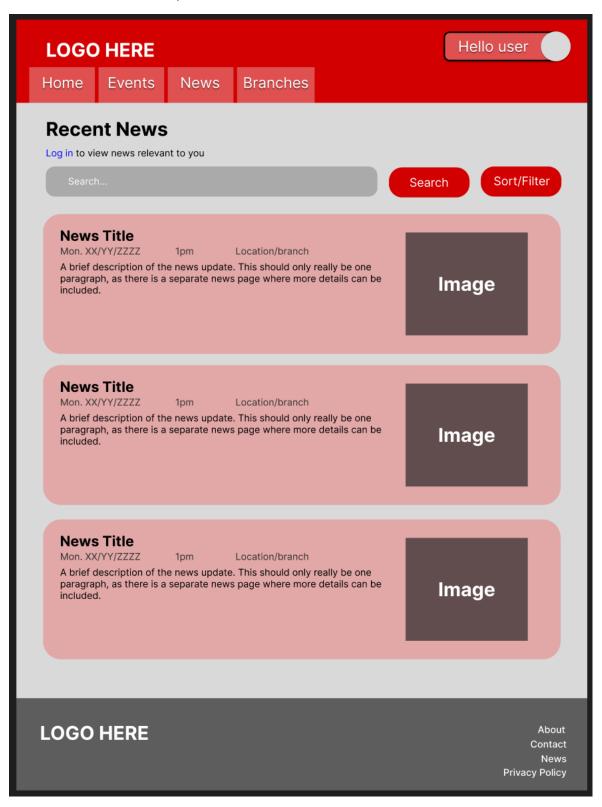


Figure 5: News Page

Specific News Page

Each news story/update has its own page where users can read the full post. The design of the page can be seen below.

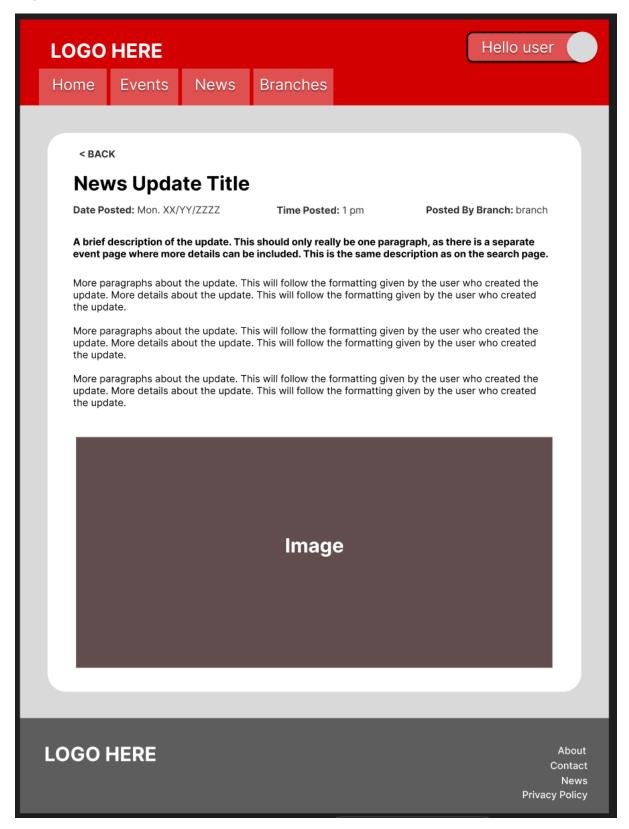


Figure 6: Specific News Page

Branches Page

A page is available where users can see the list of branches of the volunteer organisation. The design of this page can be seen below.

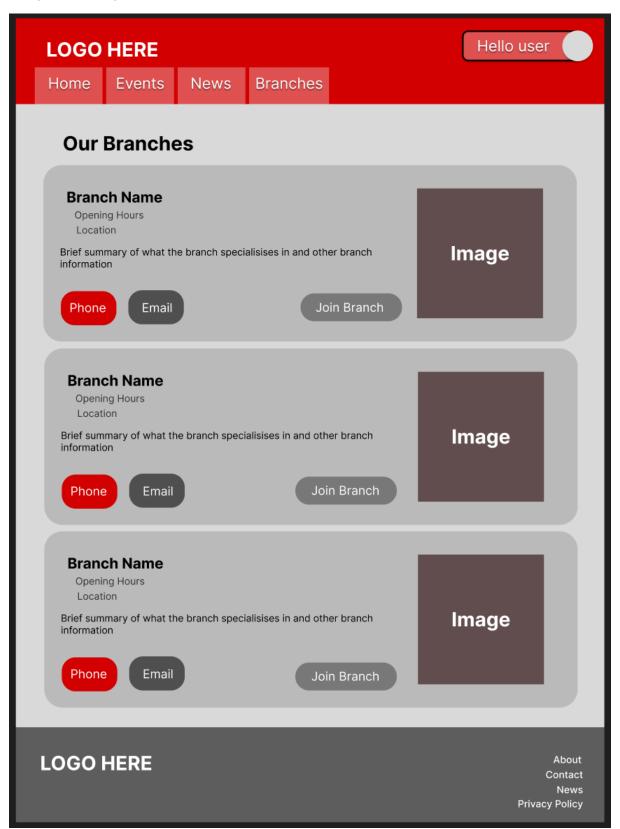


Figure 7: Branches Page

For each branch there is buttons to conveniently allow users to get in contact via phone or email, as well as a button for them to join the branch. There is also a brief description of each branch as well as some key info like location and opening hours. A picture of the branch is also displayed on the right side.

The title of each branch links to a page with more details about the branch.

Branch Details Page

The branch details pages lists all of the information shown on the branches page, as well as additional text description.

Additionally, at the bottom of the page, the events for the branch are shown, which are able to be scrolled horizontally. If a user is logged in and a member of this branch, then the events include private events, otherwise it will be public events only.

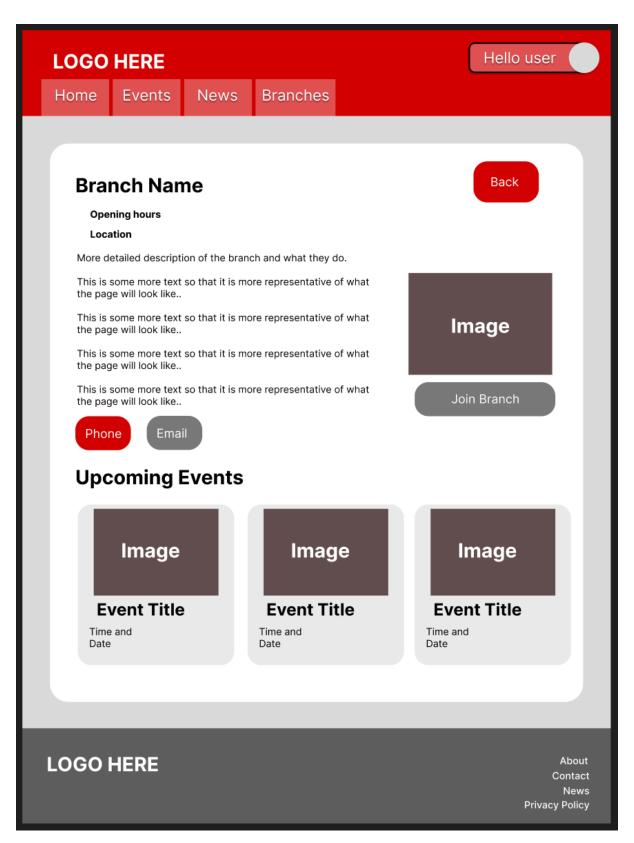


Figure 8: Branch Details Page

Login Page

The login page can be seen below. It simply allows the user to input their username and password, or alternatively sign in with a social media account. It also includes a link to the registration page for new users.

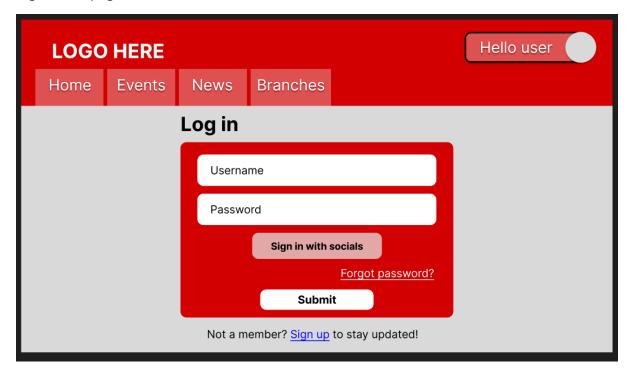


Figure 9: The Log In Page

Registration Page

The registration page design can be seen below. It allows users to choose a username, enter their email, as well as choose a password, or alternatively link their social media account.

A link to the login page is included if an existing user accidentally ends up on this page to allow them to conveniently get to the log in page.

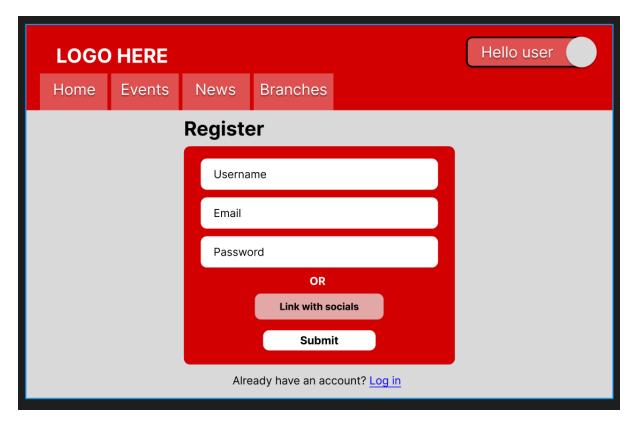


Figure 10: Registration Page

Review of Usability Heuristics

Our design was evaluated against the four usability heuristics, and where a deficiency was identified, it has or will be modified to ensure that our website is usable.

Perceivable

It is important to ensure that our website is perceivable to all users. Some of the ways this was achieved through our design was ensuring that there was high contrast between the text and background colour, which makes the text easier to read, and may allow people with poor vision to read it that they may not have been able to if there was less contrast.

The colour scheme chosen is unlikely to cause issues for most colour-blind people, as the two most common types of colour blindness are red-green and blue-yellow. The use of only reds and whites/greys should still allow elements to be distinguished easily.

Another potential flaw in out in our initial plans/design was the lack of though of alternative text for images. In our current implementation, a generic description of what the image is for is displayed as the alternative text, e.g. 'news image' or 'event image'. This is not going to be very perceivable for vision impaired people, as they will not know what is actually in the image.

To fix this, each image displayed on the website should have a properly descriptive alternative text stored on the server, which is used instead of the generic description originally used. Although this does add additionally complexity to our website, it is important to ensure that all users have a good experience of the website.

Additional fields would likely to be added whenever a user uploads an image (such as to a new event or news post) to allow them to specify the alternative text to be used. This strategy does have the downside of reliance on users to provide descriptive alternative text, which they may not always do.

Operable

After reviewing the operability of our design, it was determined that it was fairly good. All input fields will be/were implemented using standard form controls, allowing users to use the tab key to navigate between them. Additionally, no time based interactions are present, ensuring that the user has time to read/view all required information.

Fitt's law was also considered, to ensure that all buttons were sufficiently large that it does not take unnecessary time for the user to have to precisely select the button.

The pages were determined to be fairly easy to navigate, as the nav bar at the top is present on every page, with links on each page to other pages that users are likely to want to visit from that page.

One improvement to the design identified was to highlight the current page on the nav bar, to avoid any potential confusion about which page the user is currently on. This could be done by changing the colour of the box containing the link to the current page, or potentially making the text bolder than the other options. Making this change will improve the operability of the site.

Understandable

After review of our design, it was determined that it was likely understandable for the majority of users. We followed standard practices for the layouts of the pages, such as including: a navigation bar at the top of the page, options for users to sign in/out and view their account information in the top right corner. This means that users will likely not need to learn a whole new website structure as it will be quite like other websites they have already used.

The readability of the textual content on the website is not able to be controlled by us as the designers, as the majority of the content (events and news) on the website is user generated. Where text is not user generated, it has been made as clear as possible.

A key consideration when implementing the pages where users input data (creating event or news, updating personal information, etc), will be the use of input checking on the client side, to ensure that clear feedback can be provided to the user in the event they make a mistake in their inputs.

Robust

The robustness of the website is more dependant on the implementation of the website rather than the design. To ensure that the website is robust the HTML, CSS and JS functions used will be chosen to ensure that the website is compatible with all common modern browsers (Chrome, Firefox, Edge, Safari). If a particular function is not compatible with current versions of these browsers, it will not be used.

To ensure robustness, semantic HTML elements such as header, nav and footer will be used where applicable.

Consideration of Kinetic and Cognitive Load

Cognitive load on the user will be reduced by as discussed above in the understandability section standard web layout practices will be applied. Additionally, buttons for related actions, as well as links to other pages will be placed next to the relevant elements on the page. This ensures that users do not have to spend time looking for the buttons that they want to use, as they will most likely be right next to what they were last looking at.

Another method for reducing cognitive load will be providing detailed error messages explaining what went wrong if the user inputs something wrong, so they don't have to think about and troubleshoot what they did wrong themselves.

The grouping of relating functions closely together on the page also reduces the kinetic load on the user, as they have to move their mouse less distance to get to the buttons. This also allows for buttons to be made smaller, as per Fitt's law if the distance to the button is shorter it is easier for the user to make a precise movement, so the target area can be made smaller.

Appendix 1: Initial Sketches

When completing the initial design of the website, the pages were initially designed by doing a very rough sketch on paper. Theses sketches were helpful in determining the basic layout and content of each page, although some major modifications did occur for various reasons between these initial ideas and the Figma drawings shown above.

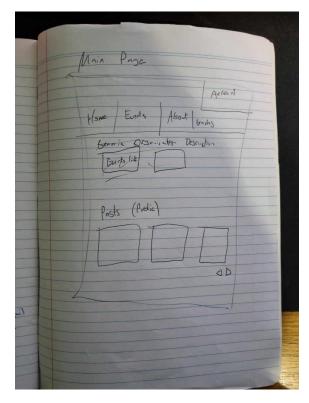


Figure 12: Initial Sketch of Home Page

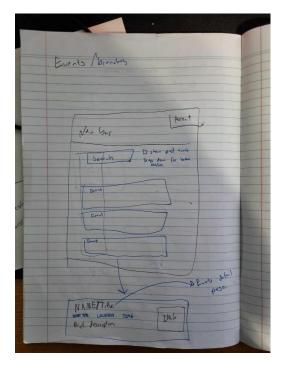


Figure 14: Events/Branches Page Initial Sketch



Figure 11: Initial Sketch of Branch Details Page, with events shown on bottom row.

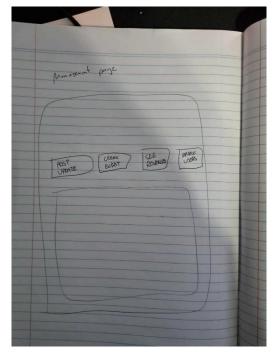


Figure 13: Management Page Initial Sketch

One of the major changes between these initial sketches and the formalised design in Figma was the removal of the management page. Initially the idea was to have all the management functions accessible through a single page. This page was removed, as to reduce both the kinetic and cognitive load, these functions were placed on the pages related to the function. For example, the create event page is now placed on the events page.