



THE UNIVERSITY
*of*ADELAIDE

Web & Database Computing

S1-2023

GROUP PROJECT

Milestone 1

Group Name: UG130 - SP
Pragya Kaushik (a1840097)
Simranjeet Singh Dahia (a1823446)
Victor Li (a1831378)

Github Link: https://github.com/UAdelaide/23S1_WDC_UG130_SP

CONTENTS

RESEARCH

[Website 1 - YouX](#)

[Website 2 – University of Adelaide Website](#)

[Website 3 – WiSTEMS University of Adelaide Website](#)

[Website 4 – Stanford Quantum Website](#)

[Website 5 – Stanford Women in Computer Science Website](#)

[Website 6 – MyImpact University of Adelaide Website](#)

[Website 7 – Adelaide University Engineering Society Website](#)

[Implementation in MySET](#)

DESIGN

[Visual Mockup](#)

[HOME Page \(Not Logged In View\)](#)

[SEE ALL CLUBS Page \(Not Logged In View\)](#)

[EVENTS Page \(Not Logged In View\)](#)

[IMPORTANT UPDATES Page \(Not Logged In View\)](#)

[SIGN UP/LOGIN Page](#)

[HOME \(Logged-in View\)](#)

[UPDATES Page \(Logged-in\)](#)

[EVENT DESCRIPTION Page \(Logged-in\)](#)

[JOIN CLUB Page \(Logged-in\)](#)

[CLUB Page \(Logged-in\)](#)

[MANAGE CLUB PAGE \(Logged-in\)](#)

[SYSTEM ADMIN PAGE \(Logged-in\)](#)

REVIEW

[DATA PLAN](#)

[DATABASE SCHEMA](#)

[IMPLEMENTATION](#)

RESEARCH

We researched many websites to find examples of different styles, structures, and features we can incorporate into our website. We specifically looked for websites that demonstrated advanced technical capabilities, innovative design elements, and effective user experience. Each of us selected and analyzed four websites in detail, leading us to have a thorough discussion of 16 websites, out of which eight websites that served as our inspiration were finally selected. During our discussions, we thoroughly examined each website, identifying and extracting specific technical information and concepts that we could adapt and apply to our own project.

During our research, we focused on several key parameters to evaluate and gather technical information about the websites, which we thought are crucial for developing a website. Here is a detailed description of the research parameters:

1. Advanced Technical Capabilities: We sought out websites that demonstrated advanced technical features and functionalities including elements such as complex animations, interactive components, custom plugins, innovative approaches to data handling or processing etc.
2. Innovative Design Elements: We looked for websites that showcased unique and visually appealing design elements, such as creative layouts, typography choices, color schemes, use of whitespace, visual hierarchy, responsive design, and engaging visual effects.
3. Effective User Experience (UX): We focused on websites that provided a seamless and intuitive user experience involving analyzing the navigation structure, user interface (UI) design, accessibility features, responsive behavior across different devices, loading times, and overall performance optimization.
4. Functionality and Features: We explored websites that showcased specific functionalities or features relevant to our project including social media integration, multimedia handling (images, videos, audio), search functionality, forms and data input, interactive maps, user authentication etc.

We present one-by-one examinations of each website, followed by a brief description of how these websites inspired us.

Website 1 - YouX

Website link: <https://youx.org.au/>

Style

Colour Palette

The YouX site uses a clean, black to white background scheme with comfortable spacing to give the webpage a professional and minimalist appearance. The colour scheme consists of predominantly black and white, with cool, brightly coloured highlights, that provide the website with a modern appeal. The text-colour uses a consistent and intuitive scheming, with black on white background and white on coloured background to keep the text readable. Light pink used to emphasise section headers and highlight the current navbar label.

Font



The site predominantly uses two font-styles. Paragraph text and section intros are written using sans-serif, which is clean and easy to read on screen. Navigation labels and headers use the Aesthetico Bold font, which makes the text stand out, as seen in Figure 1.

Figure 1: Helvetica bold heading, with sans-serif font paragraph.

Layout

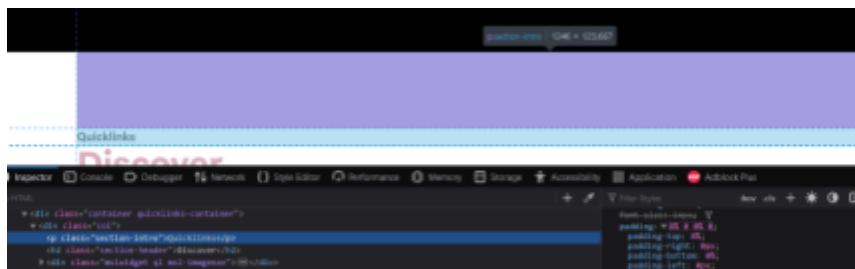


Figure 2: Section-intro paragraph with relative padding-top, as seen on right to separate new content from previous

YouX made good use of spacing and padding to create a visually appealing site. This is most evident in the webpage's use of padding to separate two sections of a page, as seen in Figure 2. This transitional space is important because it makes sure the web user is only presented with

one section's content at a time, reducing the perceived clutter. By using relative padding, the site also ensures the website layout is relative to the screen size.



17 May

[CREATE: Poetry Slam!](#)

📍 The Mezzanine, Hub Central

18 May

[Waite Quiz Night](#)

📍 Lirra Lirra Cafe, Waite Campus

Figure 3: Side margin between image elements.

The webpage makes a stylistic choice to enforce a side margin between image elements, such as with the home page's discovery section and upcoming events. This clearly separates neighbouring images, which prevents them from being mixed up.

Structure

Website Structure

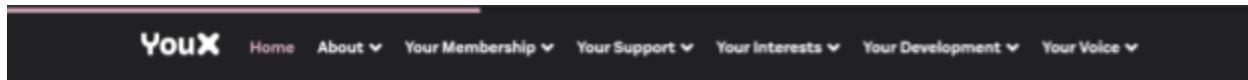
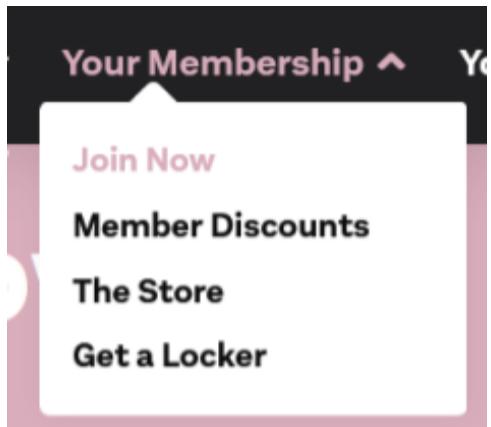


Figure 4: Fixed navigation control, available in the same position at the top of any page within the site regardless of scroll

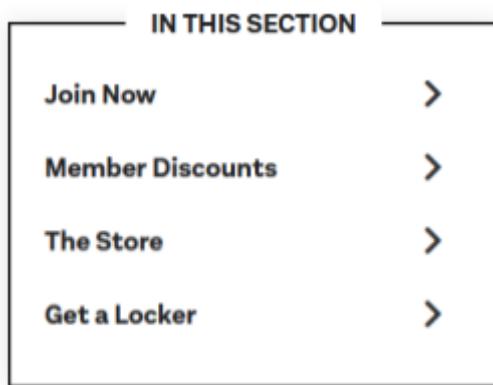
The YouX website uses well organised hierarchical web design, which facilitates easy navigation. As seen in Figure 3's navigation control, the most important pages are placed toward the left. This is because most users read from left to right and view the left side of the web page first.



The pages within the website are sorted into appropriate categories, which are always readily accessible under the appropriately named accordion labels on the navigation control. There is a clear and intuitive arrow breadcrumb that clues the users into the accordion lists. The accordion lists also expand when hovered over, reducing the need to click and the kinematic load on the user.

Figure 5 - accordion list that expands when hovered

Web Page Structure



Navigation within web pages is also very intuitive, with the presence of anchor links as seen in Figure 5 placed to the left of the text of a webpage. This quickly and effectively communicates to the user what they can expect within the page, and where to find it.

Figure 6: anchor links for in page navigation

Features

Responsive Design

YouX has a very interactive design that leads to an intuitive experience. This is achieved through the use of many responsive elements. One of these features mentioned in the structure section is the use of automatically expanding accordion lists which stay open while the whole list is hovered over.

Discover

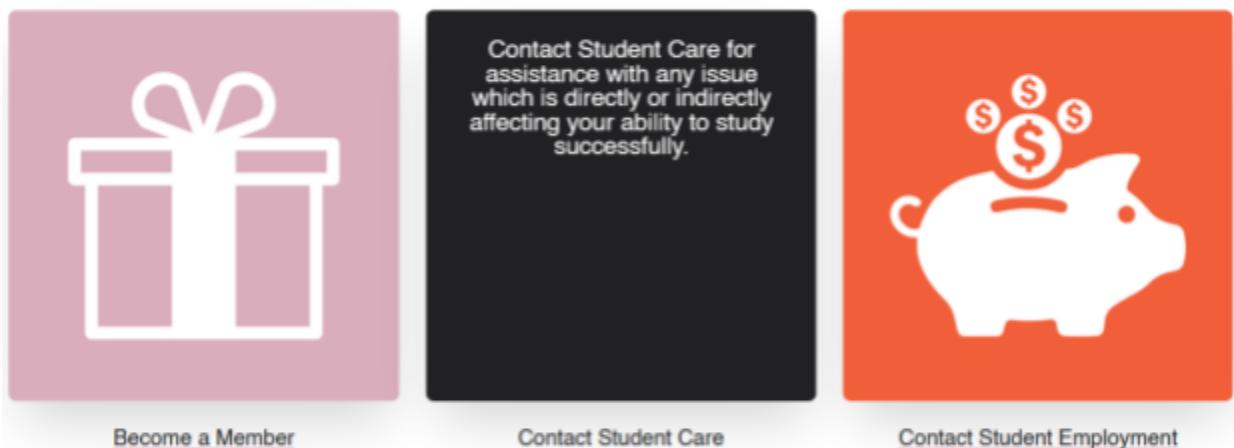


Figure 7: Discover quicklink with description activated

There are also many features that visually clue the user in to the presence of a hyperlink, such as a change of text colour to the removal of the text underline when hovered. Even the hyperlink images are responsive, with the Discover quicklinks cutting into text describing the quicklink in detail, to the events images gaining a pink border and zooming in slightly when hovered over.

Search Function



Figure 8: Search Functionality at the top right of page.

YouX has a clearly defined search bar at the top right of the page. It is located in an intuitive area, with a well named placeholder to clue the user into the functionality. The background colour of the text-area is also white, which helps the search bar stand out from the black background.

Events Feed

Check out what's happening

Upcoming Events



[View all events](#)

Figure 9: Static event feed

YouX has two event feeds, one at the start of the home page and one at the end of the homepage. The first event feed features a dynamic slide control event feed that highlights one event at a time, along with text description of the event. This is the first section the user sees on the page, and is designed to serve as an advertisement for all users who visit the page. The second event feed is a static event feed that displays multiple events, and is situated on the bottom of the page, which leads to viewing all available events.

Website 2 – University of Adelaide Website

Website Link: <https://www.adelaide.edu.au/>

This is the official website of the University of Adelaide



Find your degree

Search for [undergraduate](#), [postgraduate coursework](#) and [postgraduate research degrees](#) subjects and careers.

▪ Style

The style of the Uni Adelaide website reflects the branding and visual identity of the University. It is modern, professional, and aligned with the overall tone and image of the institution.

1. Colour Palette:

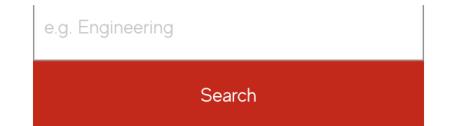
The color palette used on the Uni Adelaide website includes the university's official colors and a combination of colors that complement their branding. This is achieved through a harmonious blend of primary and secondary colors, i.e. Blue and Red, as visible everywhere on the site.

2. Font:

The choice of fonts on the Uni Adelaide website enhances readability and brand consistency as visible in the website screenshots. It includes a selection of fonts for headings, subheadings, body text, and other textual elements, ensuring they are legible across different devices.

3. Layout:

The layout of the Uni Adelaide website follows contemporary design practices, utilizing a grid system to organize content in a visually appealing and user-friendly manner. It features sections such as a header with navigation, hero/banner area, main content area, and footer.



[Browse our degrees](#)



Engage

There are many ways you can engage with us and our world-class educational and research activities. Collaborate to overcome a challenge. Apply our research to spark your innovation. Or give a financial gift to open more doors for the next generation.

Give to Adelaide Become a volunteer Supporting our communities

News

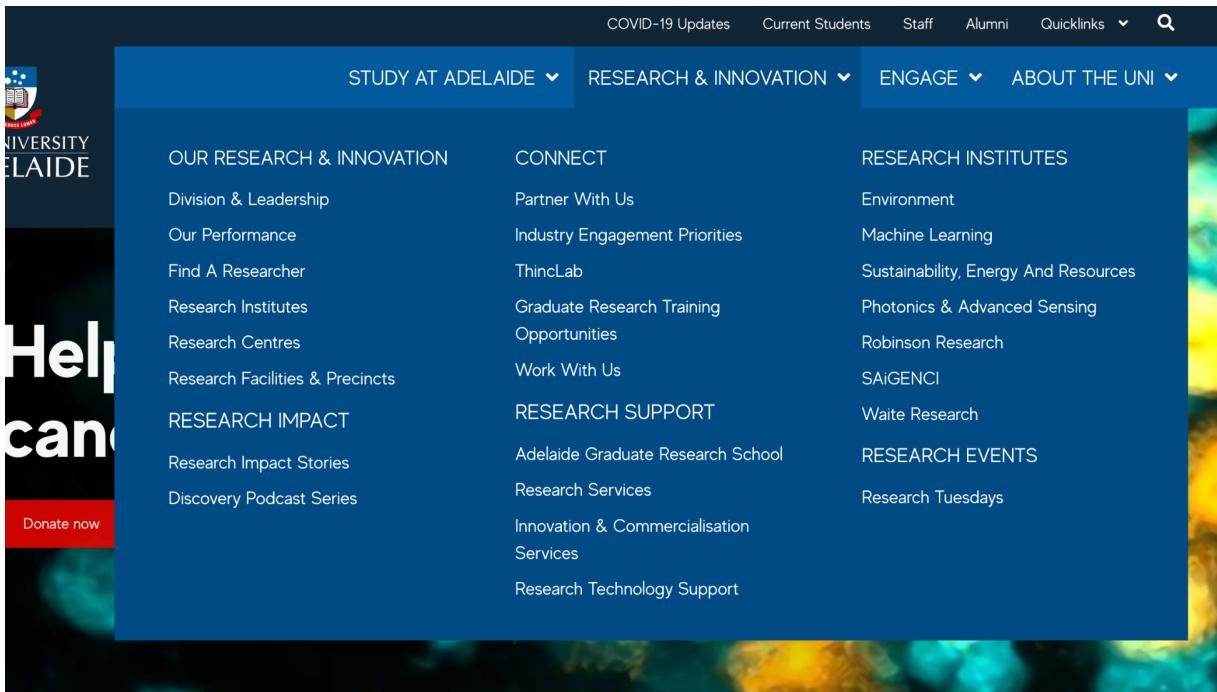
5 MAY Arts graduate awarded prestigious Hawker Scholarship Extension
Recent Bachelor of Arts graduate, Oliver Douglas, will continue his studies at the University of Adelaide by

Events

14 MAR Let Our Songs Speak for Us
Let Our Songs Speak for Us is the latest University of Adelaide Library exhibition that tells the story of CASM the Centre for Aboriginal

▪ Structure:

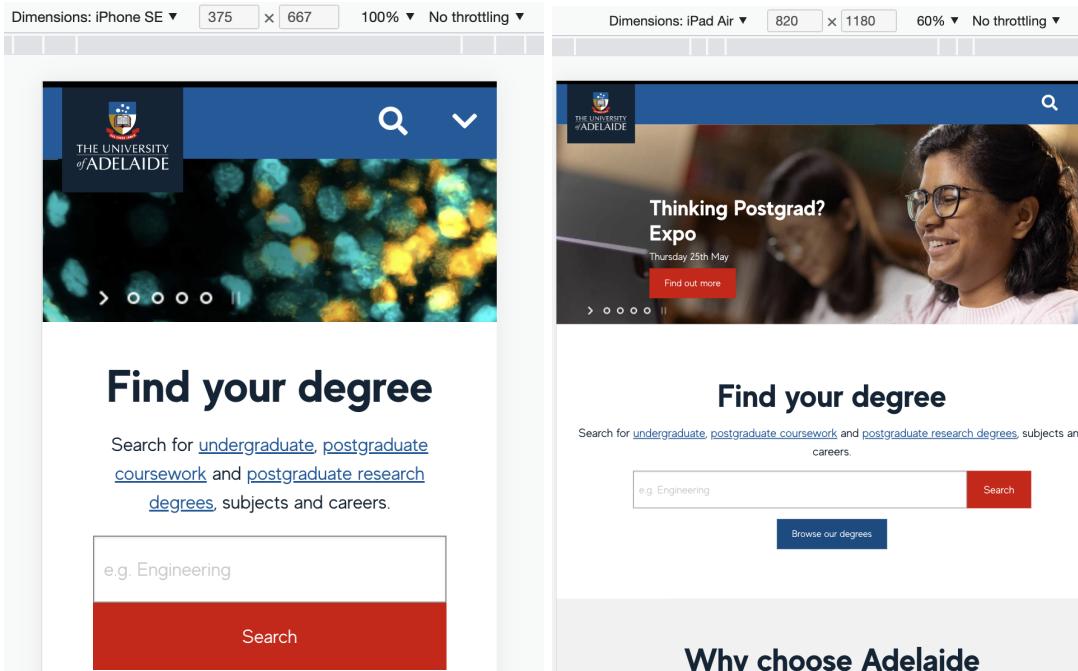
The Uni Adelaide website's structure is organized into different sections, providing information about the university, academic programs, faculties, research, news, events, resources, contact details, and pages exclusive to Current students or staff. It has a hierarchical structure, with menus and submenus for easy navigation.



▪ Features

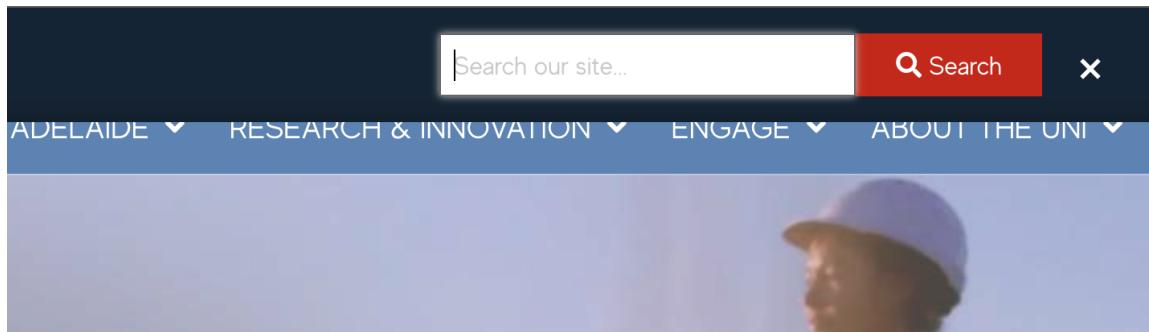
1. Responsive Design:

The Uni Adelaide website is designed with responsive web design principles, ensuring it adapts and displays correctly across various devices and screen sizes, including desktops, tablets, and smartphones. This allows users to have a consistent experience regardless of the device they are using, as seen in screenshots for iPhone and iPad.



2. Search Function:

The Uni Adelaide website incorporates a search functionality that enables users to quickly find specific information, such as programs, courses, staff, or research topics. This feature helps users navigate the website efficiently and access the content they are looking for.



3. Event Feed/Updates:

To keep the community informed, the Uni Adelaide website includes an event feed or updates section. This section could feature upcoming events, news articles, announcements, or important notices relevant to students, staff, and the public.

News

5
MAY

Arts graduate awarded prestigious Hawker Scholarship Extension

Recent Bachelor of Arts graduate, Oliver Douglas, will continue his studies at the University of Adelaide by pursuing his Honours in...

5
MAY

South Australia becoming mRNA centre of excellence

The University of Adelaide's School of Chemical Engineering will assist in developing nation-leading technology that will be used to develop...

4
MAY

World-changing research on show at inaugural symposium

The latest collaborative research carried out by leading experts at the University of Adelaide and the University of Nottingham will be the...

[more...](#)

Events

14
MAR

Let Our Songs Speak for Us

Let Our Songs Speak for Us is the latest University of Adelaide Library exhibition that tells the story of CASM, the Centre for Aboriginal...

3
MAY

Begg Museum: Memories of Early Dentistry and our Pioneer Orthodontist

Dr Percival Raymond Begg AO is an Orthodontic pioneer and was the University's first lecturer in orthodontics. The museum displays items...

16
MAY

AHURI Roadshow

The Australian Housing and Urban Research Institute provides competitive Category 1 funding for work on housing, homelessness, cities, and...

[more...](#)

- Website 3 – WiSTEMS University of Adelaide Website

<https://wistemsadelaide.com.au/>

This website is the official website of the Women in STEM Society (WiSTEMS) at the University of Adelaide.



- Style

The website has a simple and clean design with a white background and black text. The website's logo features a purple and white color scheme, which is also used for some of the headings and buttons on the website.

1. Colour Palette:

The color scheme from the website's logo featuring Purple and White is used for some of the headings and buttons on the website.

A screenshot of the "About Us" section of the WiSTEMS website. The section has a purple background. At the top, there is a logo for the University of Adelaide (74 W 18384) and the text "is STEM". Below the logo is the heading "About Us". A paragraph of text describes the purpose and activities of the club. The text is white and contrasts with the purple background.

2. Font:

The website uses a sans-serif font for most of the text, which is easy to read and modern, as can be seen in the screenshots.

3. Layout:

The layout is simple and easy to navigate, with a menu bar at the top of the page and links to different sections of the website.



▪ Structure

The website has several sections, including Home, About Us, Events etc.. The Home page features a brief introduction to the society and an invitation to join with Become a Member and Subscribe buttons, followed by updates. The About page provides more information about the society's mission, values, and history. The Events page lists upcoming events and activities organized by the society.

Website Structure: The website has a simple and straightforward structure, with a clear hierarchy of information and easy navigation.



JOIN US

University student?

Sign up for a free membership to receive emails about upcoming events and opportunities.

[Become a member](#)

Interested in STEM?

Join our *STEM in Your Future* mailing list to keep up with our latest articles about the diverse people of STEM and their careers.

[Subscribe](#)

- **Features**

- 1. Responsive Design:**

The website has a responsive design, which means that it adjusts to different screen sizes and devices.

- 2. Search Function:**

The website has a search function that allows users to search for specific content on the website.

- 3. Event Feed/Updates:**

The website has an Events page that lists upcoming events and activities organized by the society. Users can also sign up for the STEM in Your Future mailing list to receive updates about the latest articles and events.

- 4. Subscription buttons:**

The website has used buttons for various actions like Subscription and Sign Up.

- Website 4 – Stanford Quantum Website

<https://qc.stanford.edu/#>



- Style

The website has an elegant and clean style. This is achieved through a combination of the simple and clean font, and the use of empty space in the layout.

1. Colour Palette

The website uses a very simple, predominantly black and white colour scheme. Bright colourful objects are then used to contrast with the background and draw user attention.

What to expect



SOCIAL EVENTS

Get to know other people interested in quantum computing by hanging out at casual social events, such as ice cream outings in Palo Alto and board game nights.



WORKSHOPS

Get active with these interactive workshops: code on a real quantum computer, brainstorm with others on open problems in quantum computing.

2. Font:

The website uses a very simple, but elegant font, that adds to the website's appeal. The website makes an interesting decision of making paragraph text bold and keeps the header font normal.

3. Layout

The website contains a lot of white, unused space in the web design. This redirects the user's attention to the elements that break up the monotony of the space. The developers of the Stanford Quantum Computing Association site clearly knew this, and designed the site so that each section would be able to capture the user's full attention without competing with other elements in the page.

Our mission is to develop the future scientists and engineers
involved in quantum computing.

This will be achieved by our three main goals:



▪ Structure

The basic hierarchy of the website is similar to youX and University of Adelaide websites. A fixed navigation menu, located at the top of the page, allows users to easily access all other pages within the site with very little kinematic effort.

In the webpages, there is an anchor link menu on the left hand side to summarise the contents of the page and help users quickly navigate the page.

About

The Association

Executive Committee

Social & Community Impact Committee

General Event & Partnerships Committee

Project and Hackathon Committee

Quantum High School

Alumni

About the Association

The Stanford Quantum Computing Association and only student organization at Stanford dedicated to quantum computing. We aim to promote quantum computing literacy and research within the Stanford community and beyond. Check out what we've done!

▪ Features

1. Video Background

The website's homepage uses a short youtube video to create a video background. This video begins when the user first clicks onto the div, and the video creates an illusion of travelling through space. This added to the prestigious and elegant appeal of the site.

2. Responsive Web Design

The webpage uses responsive web design, especially for clickable elements like page references and buttons to cue users into these objects being interactable.

Apart from these websites, we also examined the websites below for inspiration. We shall not go in much detail for these websites, but they helped us finalise the style, layout and structure for MySET.

- Website 5 – Stanford Women in Computer Science Website

<https://www.stanfordwomenincomputerscience.com/>

- Website 6 – MyImpact University of Adelaide Website

<https://app.betterimpact.com/Login/Login>

- Website 7 – Adelaide University Engineering Society Website

<https://youx.org.au/interests/clubs/join/aues/>

Implementation in MySET

In implementing the MySET website, we drew inspiration from the above websites for the layout, styles and other manners. However, we took these inspirations and enhanced them in a more sophisticated and technically advanced manner.

The University of Adelaide website was our inspiration for the layout of upcoming events and important updates, as well as the footer design and the header logo design.

For the layout of upcoming events and important updates, we shall create an engaging and interactive experience by adding advanced filtering and sorting options, interactive event cards, and seamless integration with our content management system (CMS). This will allow for personalized browsing and easy management of the section.

In terms of the footer design, we focused on visual enhancements, optimized functionality, and providing additional relevant information. We incorporated visually appealing elements, optimized the standard components, and included supplementary information to create a comprehensive user experience.

In the case of the buttons on the home page, we took inspiration from the buttons on the WISTEMS website and analyzed their design elements and CSS code to create similar buttons that fit our website's aesthetic.

For the ‘Reasons to Join a Club’ div, the Stanford Quantum website gave us the inspiration. We also got ideas to make our website look more trustworthy, and welcoming. We liked their approach of design directly relating to the project topic, which led us to use the background picture of a group of students.

Overall, our implementation in MySET reflects a more elaborate, technical, and sophisticated approach to the inspirations we drew from existing websites.

DESIGN

Below we present the detailed sketches and wireframes that represent the overall layout and structure of our website “MySET”.

While designing the user experience (UX) and user interface (UI) for MySET, the following concepts were taken well into consideration:

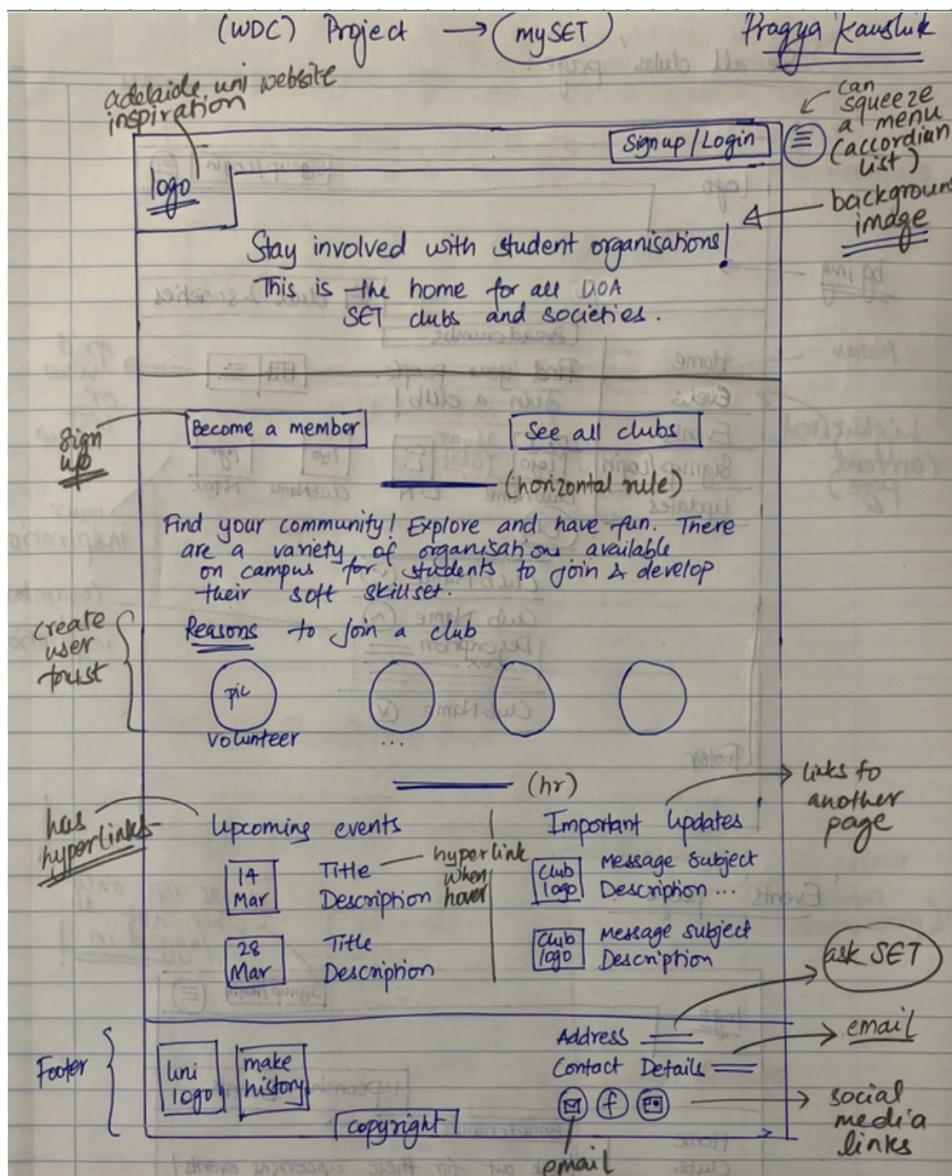
1. Usability: We ensured that the website is easy to use, navigate, and understand for the user. Hence, we focused on having clear navigation menus, intuitive user flows, and prominent calls-to-action.
2. Accessibility: We shall also try to make MySET accessible to users with disabilities, by providing alternative text for images, using semantic HTML markup, and other helpful alternatives.
3. Consistency: We want to maintain visual and functional consistency throughout your website. To ensure this, we use consistent design elements (colors, fonts, typography, layout).
4. Responsive Design: We shall ensure that our website is responsive and adapts to different screen sizes and devices. We are designing responsive layouts that adapt to different screen sizes and devices, ensuring a seamless experience on both desktop and mobile platforms.
5. Feedback and Validation: Our site shall provide feedback to users when they interact with MySET, including real-time validation, error messages, success notifications, and loading indicators to inform users about their actions and the system's response.
6. Performance Optimization: We shall optimize the web application for fast loading times and smooth performance by using minimize sized files.
7. Error Handling: We shall design error messages and error pages that provide clear instructions and guidance to users when errors occur. Help users understand what went wrong and how they can resolve the issue.
8. User Testing and Feedback: We shall conduct user testing sessions to gather feedback and insights from our fellow students, to iterate on your design and improve the user experience based on real user preferences and needs.

Visual Mockup

HOME Page (Not Logged In View)

- Overall

This is the design of the full home page that will be available to both members and non-members. Not all of it will be visible at once. Each section and functionality will be broken down and explained later.



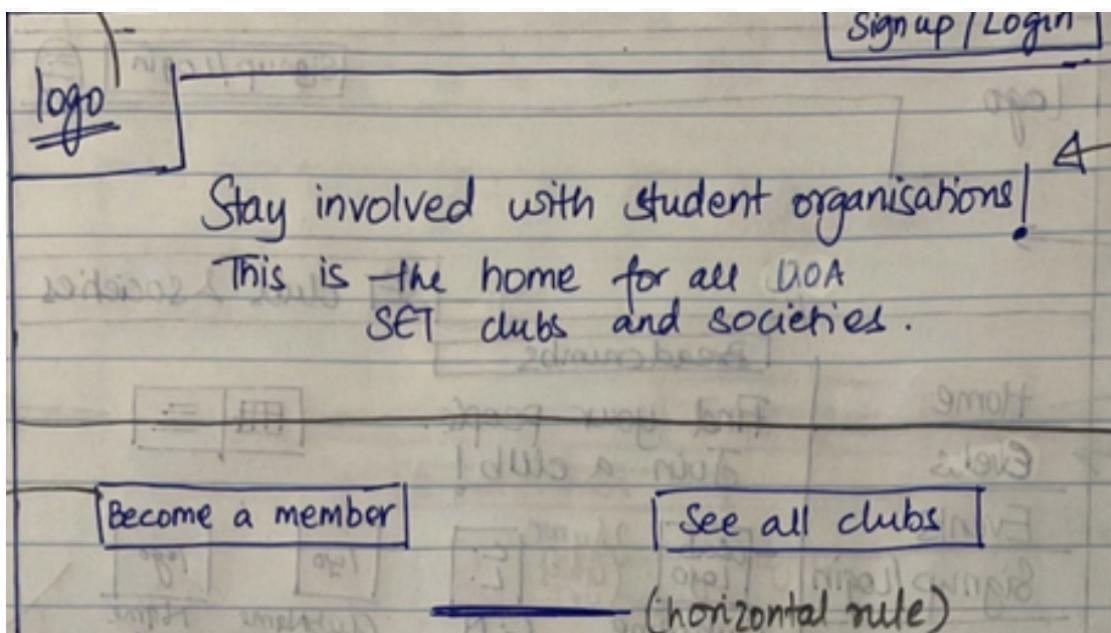
- **First View**

The figure above shows what a new user of the page will see upon entering the page. The large section of space below the header is designated for a background image, with bold header text with the site's message on top.

Unregistered users will be able to view clubs and events, but unable to join. They can see messages and updates intended for everyone. The unregistered users are encouraged to sign-up or login from the clear 'sign up/login' button and the 'Become a member' button.

The line in between represents the start of a new div, separating the background image from the text section divs. Within the div with the buttons, there will be a top and bottom margin that separates the section's content from previous and following content. This is inspired by the front page of Adelaide University's web page.

Two buttons will be immediately visible to the user upon first entry; 'Become a member' and 'See all clubs'. These will be centred on the page, with padding relative to the screen size. The buttons will use a black background with white font, and be quick links to the sign up page and clubs page respectively.



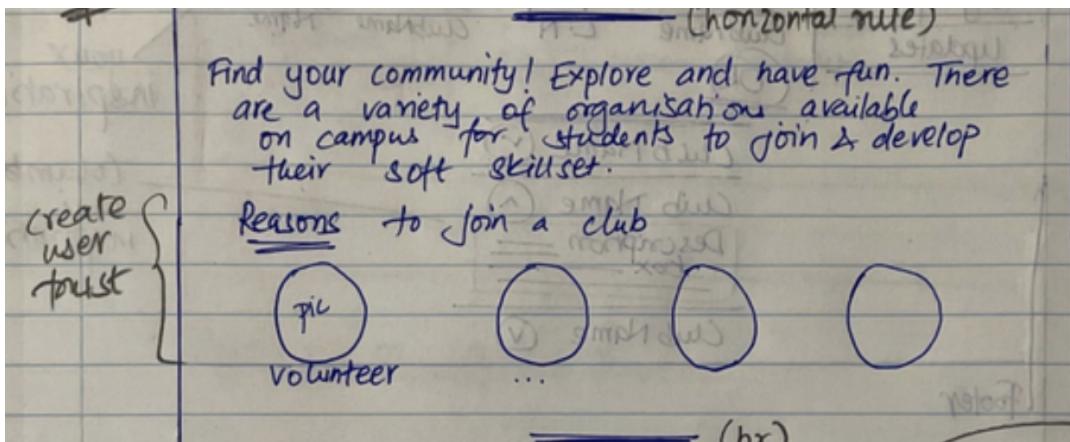
Features and Interactions:

- The 'Become a member', 'See all clubs' and 'Sign up / Login' buttons change the border colour and underline border text when hovered over.
- The logo in the header is a link to the home page
- There will be a hamburger icon to the right of the 'Sign up / Login' button in the header, which functions as a collapsed accordion list.

- When hovered over or while displaying the accordion list, the hamburger icon changes colour.
- When clicked, the hamburger icon expands, displaying a list containing ['See all clubs', 'See all events', 'See all notifications'] directly below. This list is still connected to the icon, and collapses back into the hamburger icon when the user clicks anywhere else.

- **Second Section**

The website is both a club management site and a club site. The next section is designed to provide the new user with reasons for joining the club while building trust in the site. This takes inspiration from the 'Study at Adelaide' section of Adelaide University.



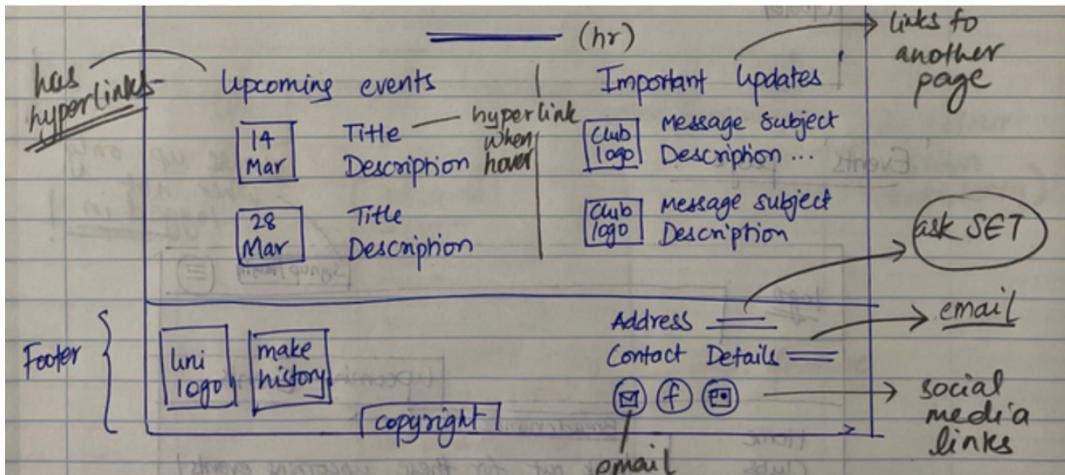
Section 2, convincing the new user to join a club

Features and Interactions

- Both the image and the image's corresponding text in the reasons to join club link to a logical page containing more information

- **Events Feed/Updates**

The final section of the home page contains two feeds; an upcoming events feed and an important updates feed. The two different feeds are visually separated by a horizontal border, and will each take up half the page width.



Events Feed and Footer

Features and Interactions:

- The 'Upcoming Events' header is a link to the page displaying all events
- The 'Important Updates' header is a link to a page displaying all updates
- The titles and images to the upcoming events will serve as quick links to each event's main page, with full description and details
- Clicking the message subject will link to a page containing the full message description.

● Footer

Finally, the bottom of the home page features a standard footer. The footer design will be used in all the other pages within the site. On the left half of the footer is the site's logo. On the right, will be the address, contact and social media links. Copyright will be centred at the very bottom of the page.

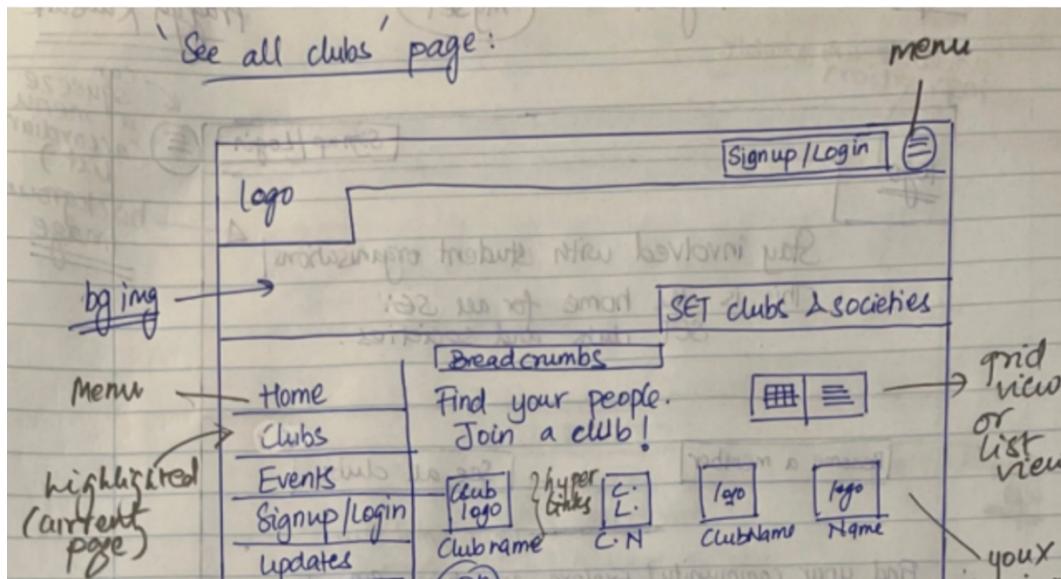
Features and Interactions:

- Hovering over the email or contact details will change the text colour. Clicking the link directs the user to a mailing page, with the clicked email as the recipient.
- Clicking the social media links will open a new page containing the website's respective social media's page.

SEE ALL CLUBS Page (Not Logged In View)

• Overall

This page is for the users to view all the available Clubs and Societies in the University. This will be available to both members and non-members.



• First View

At the top of the page is the same header design and the same background image to maintain consistency within the site. On the bottom right of the background image will be the webpage title. This design will remain consistent for all other non-home web pages within the site. Below the background div is the content div.

On the left side of the web page in the content div is the navigation menu. The current page is highlighted within the menu.

In the top-left corner of the content div, is the GridView / ListView controller. This element's measurements will be 30 px by 30 px.

As the user scrolls, the page will dynamically load in more clubs, until all clubs are displayed. After which, the page ends with the same footer used in the home page.

Features and Interactions

Side Navigation

- Text becomes underlined upon, and background colour of the nav `` element changes changes to #000 (black) and the text colour changes to #FFF (white).
- The `` elements will use padding: 1 rem, 0.8 rem.
 - Padding size inspired by University of Adelaide site's side navigation

Club Display (Grid)

- Club display will show 4 clubs per row on a full sized screen
- When screen size is reduced, the number of elements shown is also reduced
- The size of the images is 60 px by 60 px
- Text below the images will inherit their colour. Will have base font size. Underlines when hovered.
- Elements in the display will use space between, with 20px padding between

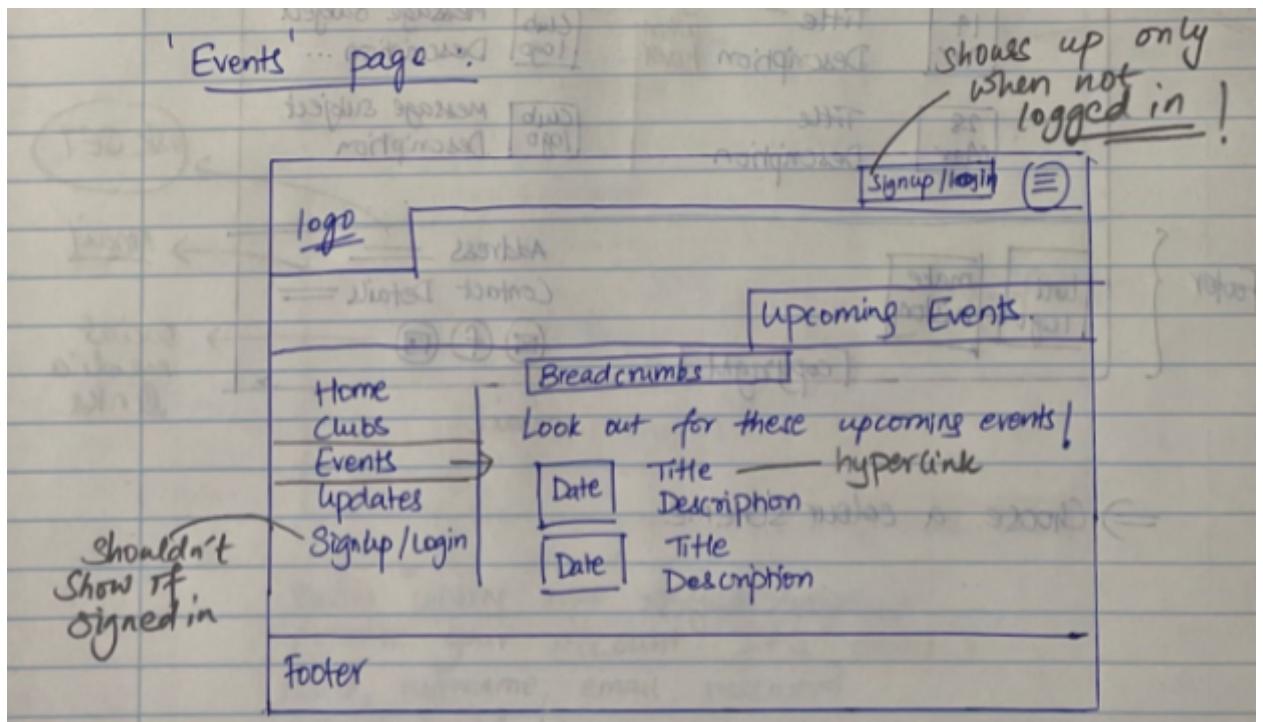
Club Display (List)

- List will remove all images, and display the club names as a single list.
- Club names will have base font size, text will be inherit, and will underline + change colour when hovered over
- When clicked, it will take you to the respective club page

EVENTS Page (Not Logged In View)

• Overall

This is the events page that the users are directed to when they click 'Upcoming events' on the main page. The page has the title 'Upcoming Events' and the clearly visible 'Upcoming Events' header to prevent confusion when redirected, reducing cognitive load.



'Events' Page

The 'Events' side navigation will be highlighted to further reinforce the location of the page.

Header and Footer will use the same design as previous pages.

Features and Interactions

Side Navigation

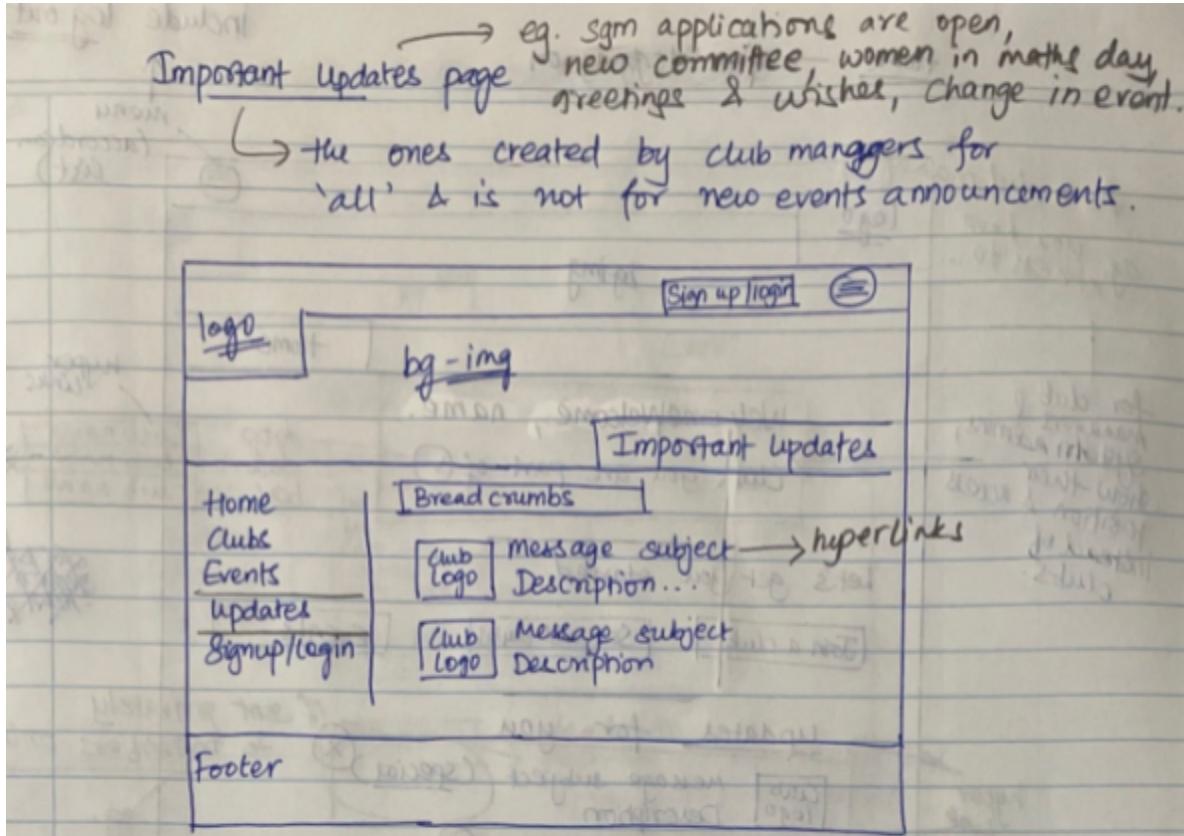
- The side navigation will be the same as in the 'All clubs' page.
- The Sign-up / Login in the header and in the side navigation will be hidden from view after the user logs in.

Events Display

- Each event will be contained in its own div, with a light grey (#D3D3D3) border. When hovered over, the border colour becomes #000, along with a 10px box shadow of colour #000,

- The date part of the event is a div with the day and a shortened version of the month name within. For example, the 1st of March will be displayed as '1 Mar'. The text colour will be white, and the font will be `<h2>`, and the fontsize will be 1.2 rem.
 - Background colour of the div will be dark-blue (#00002E)
 - The div will be of size 50 px by 50 px, and the text will be centred.
 - There is a 20 px margin between the Date and the Title + Description
 - Title will be `<h3>` and Description will be `<p>`, same as in Events Feed and Footer
- Breadcrumbs
- The breadcrumbs are a navigational trial that helps the user keep track of where they are. The breadcrumbs on this page will read 'Home/Events'. Font size will be 1.0 rem. Font colour is #FFF.
 - Inspired by the University of Adelaide breadcrumbs.

IMPORTANT UPDATES Page (Not Logged In View)



Important Updates Page Design

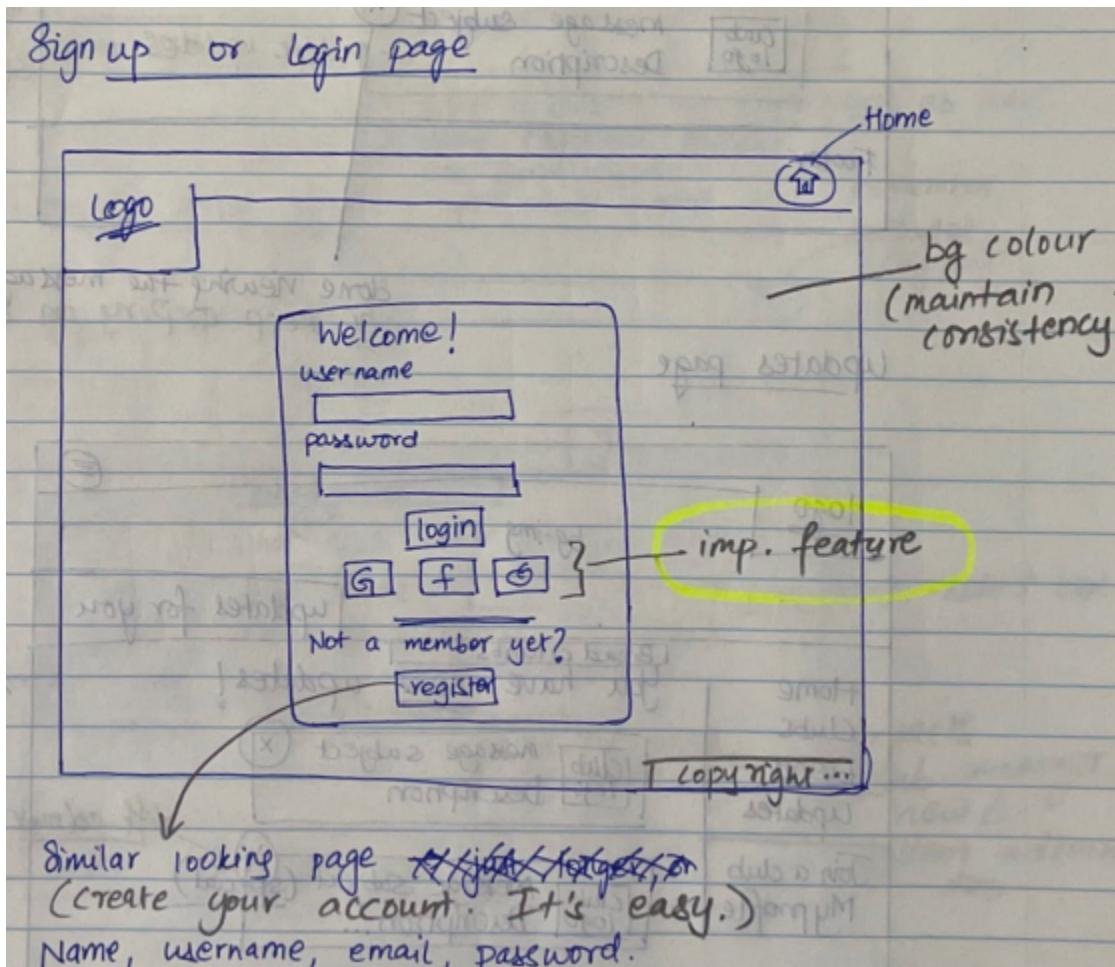
This is the page the users are redirected to after clicking the 'Important Updates' in the home page. The web page has the same basic structure as the 'Events' page. This is for internal consistency within the site, which also reduces the need for the users to relearn the formatting of each page, further reducing cognitive load.

Features and Interactions

Updates Display Page

- The club logos will be the same size as the date divs from the 'Events' page.
- The 'Message Subject' will have the same

SIGN UP/LOGIN Page



Sign-up / Login page

The user is redirected to the 'Sign-up / Login' page when the user selects 'Sign-up / login'. The page will still maintain the same header and background colouring, so the user knows that they are still within the website.

Sign-up Page: When the user clicks on 'Not a member yet?' or 'register', the user will be redirected to another page with the same formatting as the Sign-up / Login Page. However, this page will ask for Name, Username, Email and Password, with a 'Register' button instead of 'Login'.

After Login or Sign-up: The user will be redirected back to the home page.

Features / Interactions

Login Form

- The login form will be placed in its own div within the webpage. The div will have a 2px #FFF rounded border to separate it from the background
- Div size: width 60 vw. Max width: 500 px. Min-width 300 px.
- ‘Not a member yet?’ and ‘Register’ will both take the user to the ‘Sign-up’ page.
- A hr will separate the social media integration from the ‘Not a member yet?’ hyperlink

Text areas

- The text areas will have logical placeholders prompting the user to enter the correct information.
- Text areas will have min-height 2em, and a 10px top margin to separate it from the corresponding text.

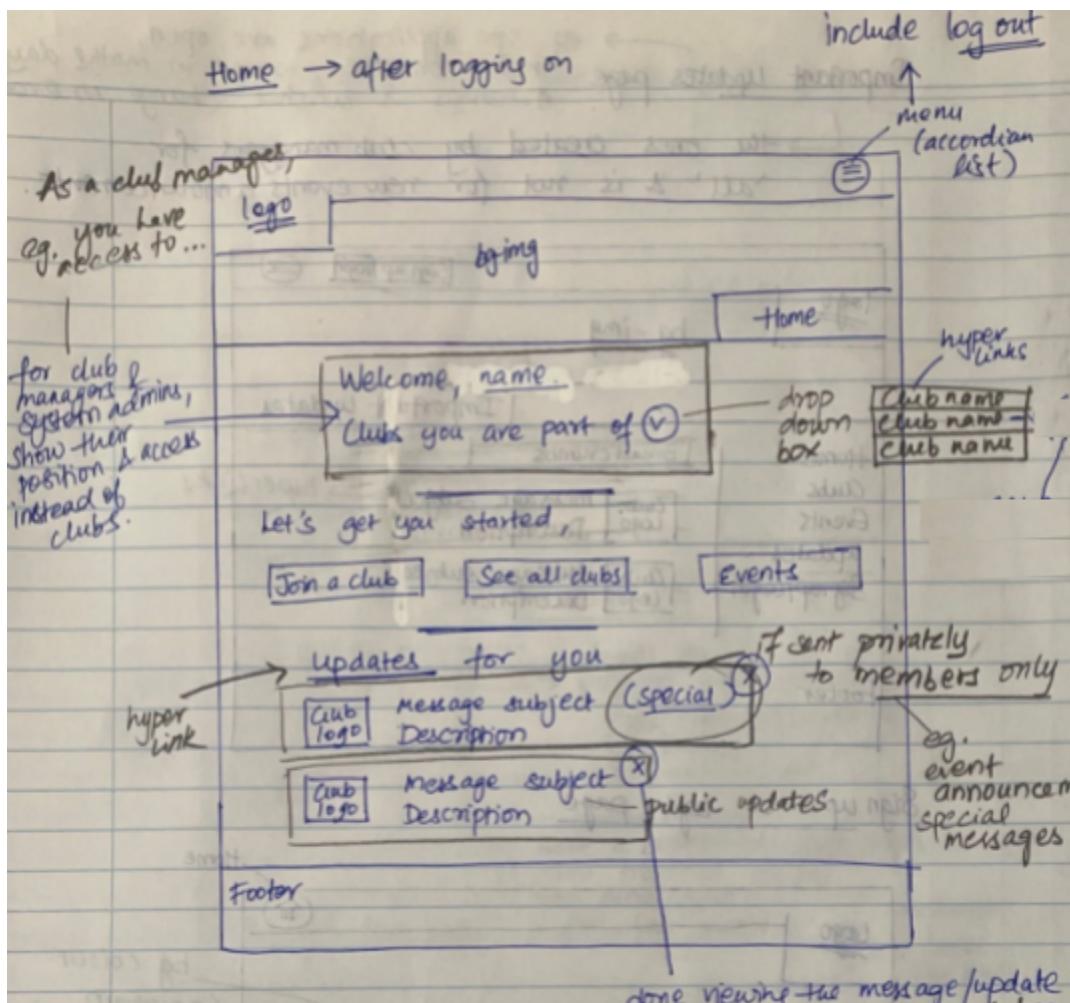
Social Media Integration

- The social media images will be 50 by 50 px
- Arranged using justify-content: space-between and flexbox
- Images are buttons that perform social media verification
 - Once done, the user is let in

Sign-up Form

- The sign-up form will have the same formatting as the Login Form.
- The form will have 4 Elements:
 - Name
 - Username
 - Email
 - Password
- The elements will each be on their own line, as seen in the Signup / Login form.
- The Sign-up form will not have:
 - Login button
 - Social media registration
 - Not a member yet

HOME (Logged-in View)



Home page full view

The log-in view of the home page is designed for convenience. The page is designed to welcome the user and also serve as a hub for everywhere the user may want to go.

When the user logs in, the server will be able to keep track of the clubs and events they join, and create a personalised updates feed for the user.

The header, footer and colour palette will remain the same as the un-logged in view.

Features and Interactions

Welcome Div

- Welcome div will have a be light grey (#eddede) to separate it from the background.
- The text within the div will all be level 3 headers
- Welcome, [user's name] will be in bold to stand out

- Size: 60 vw
- The dropdown arrow is a cue for a dropdown box
- When clicked, a dropdown box of the same width as the Welcome div will slide down.
- Background colour is inherited from welcome div
- Font size of the labels will be 1.5 rem, and the labels will have a height of 3 rem
- Each option in the dropdown box is a link to the respective club home page, and has a border of 1px and a border colour of dark grey (#5A5A5A)

Let's get started buttons

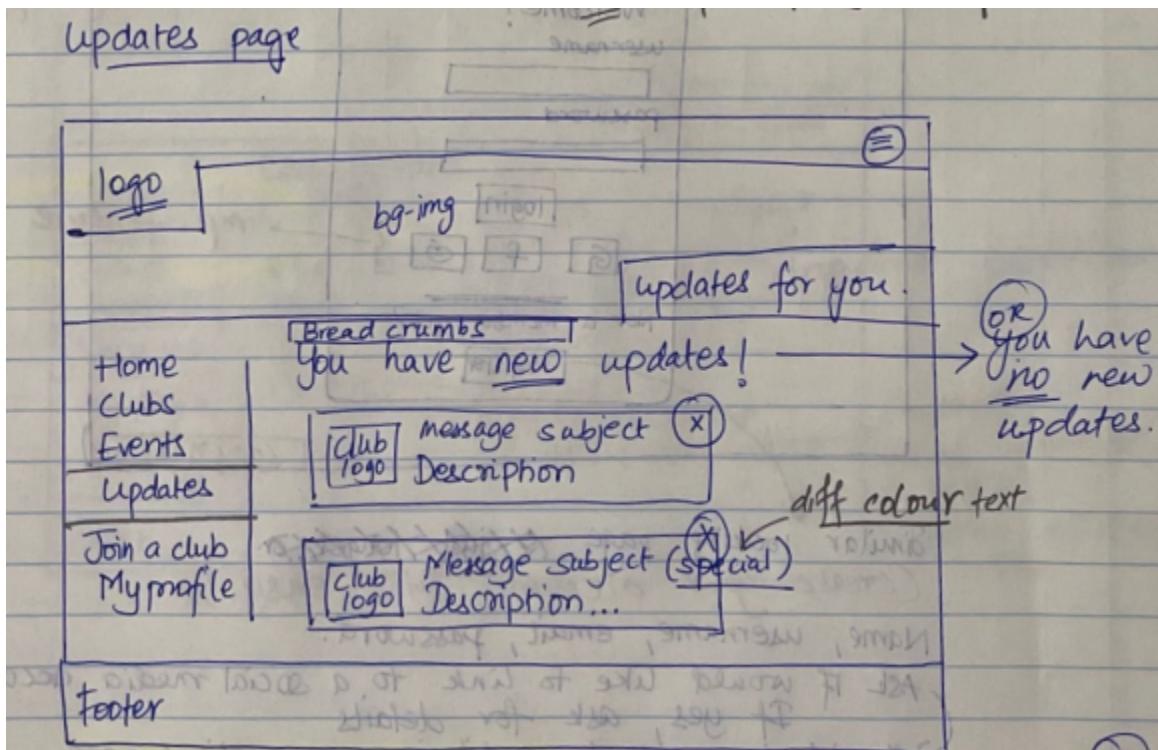
- Buttons
 - Background color: #000 and Padding: 10px, 20px
 - Font Size: 1.0 rem, Font colour #FFF, Font-style: Bold
- Div Containing buttons
 - Border-Box: Flex, Justify-Content: Space Apart
 - Padding: 20px

Updates Feed

- 'Updates' links to logged-in updates page.
 - Level 2 Heading
 - Font size, colour, family: inherit
 - Underlines when hovered
 - Padding-bottom: 20px
- Update Message
 - Div
 - Background colour: #eddeded (light grey)
 - Text-align: left
 - Div is aligned left
 - Margin left: 40 px
 - Margin bottom: 10px
 - Use the white background to differentiate different updates
 - Club Logo
 - Size: 80px by 80 px
 - Padding: 10
 - Message Title
 - Level 3 Heading
 - Font size, colour, family: inherit
 - Underlines when hovered

- Padding-bottom: 20px
- Description
 - Paragraph element
 - 1.0 em
- 'X' button
 - Changes colour from black to blue when hovered
 - Hides the Div
- [Special]
 - Font color: blue
 - Always displayed top-right
 - Padding top, right: 10px

UPDATES Page (Logged-in)



Full Updates page

This page is the important updates page view when logged in. The basic web page structure is the same as from 'Important Updates', but it includes several new functionalities.

These are:

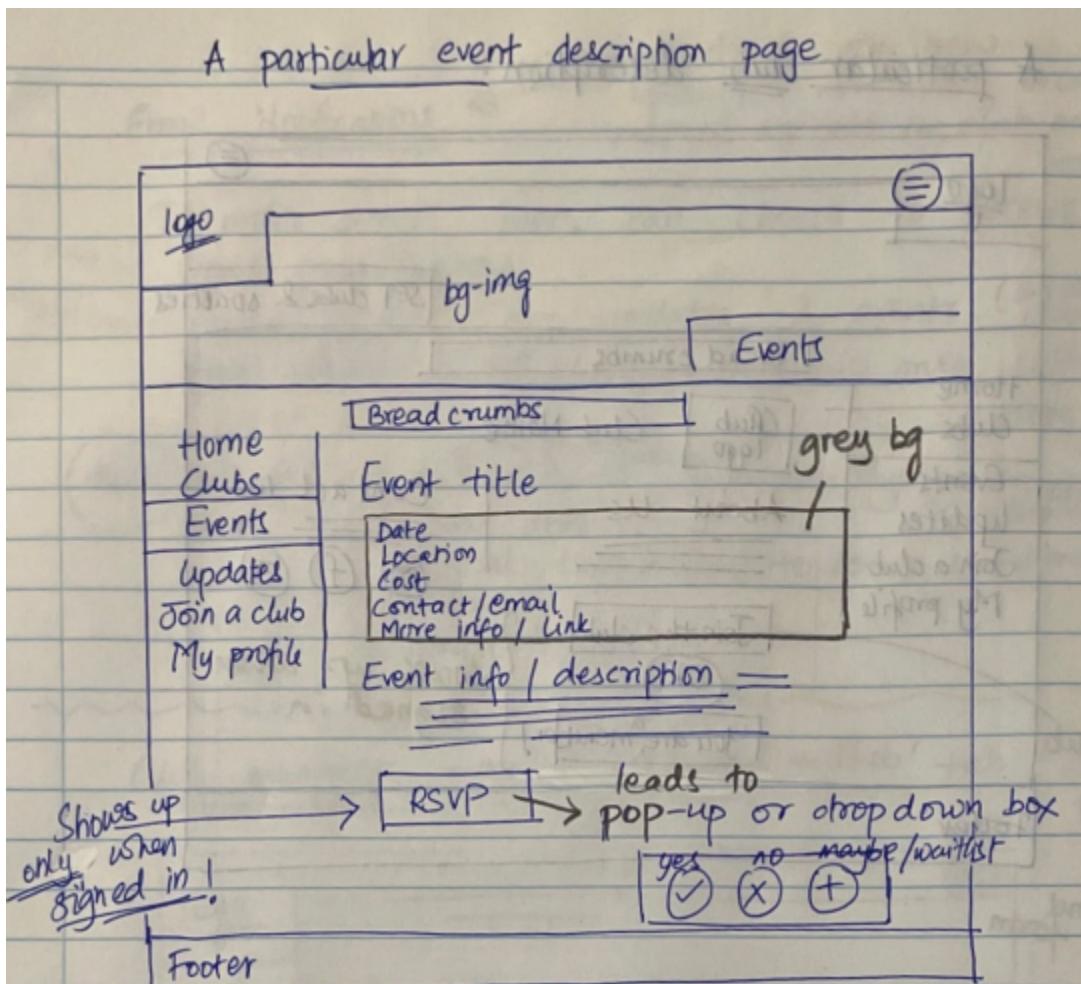
- Join a club
- My Profile
- Close updates
- New updates indicator

Features and Interactions

- Join a club / My profile are new list elements in the side navigation. The formatting is the same as before
 - These link to their own respective pages when clicked
- 'X' Button is the same as in the 'Update Message' above
- New updates indicator
 - If the user has received a new update since their last session
 - 'new' is underlined, and the level 2 header displays 'You have new updates!'

- The underline reduces the cognitive load needed to identify the state of the new updates indicator
- Else
 - the level 2 header displays 'You have no new updates!'

EVENT DESCRIPTION Page (Logged-in)



Full event description page

This is the page template for any particular event that is created. This view is only for users that are logged in.

The basic page layout is the same as the Events page, but with an event description instead of an event feed as the main content.

Features and Implementation

Event Title

- Text-align: left
- Level 3 header
- font colour: #000

Event Details Div

- Background color: #EDEDED (Light grey)

- Size: 30vh, 60 vw
- Padding: 20px
- Text
 - All paragraph elements
 - Labels are bold to differentiate the associated content

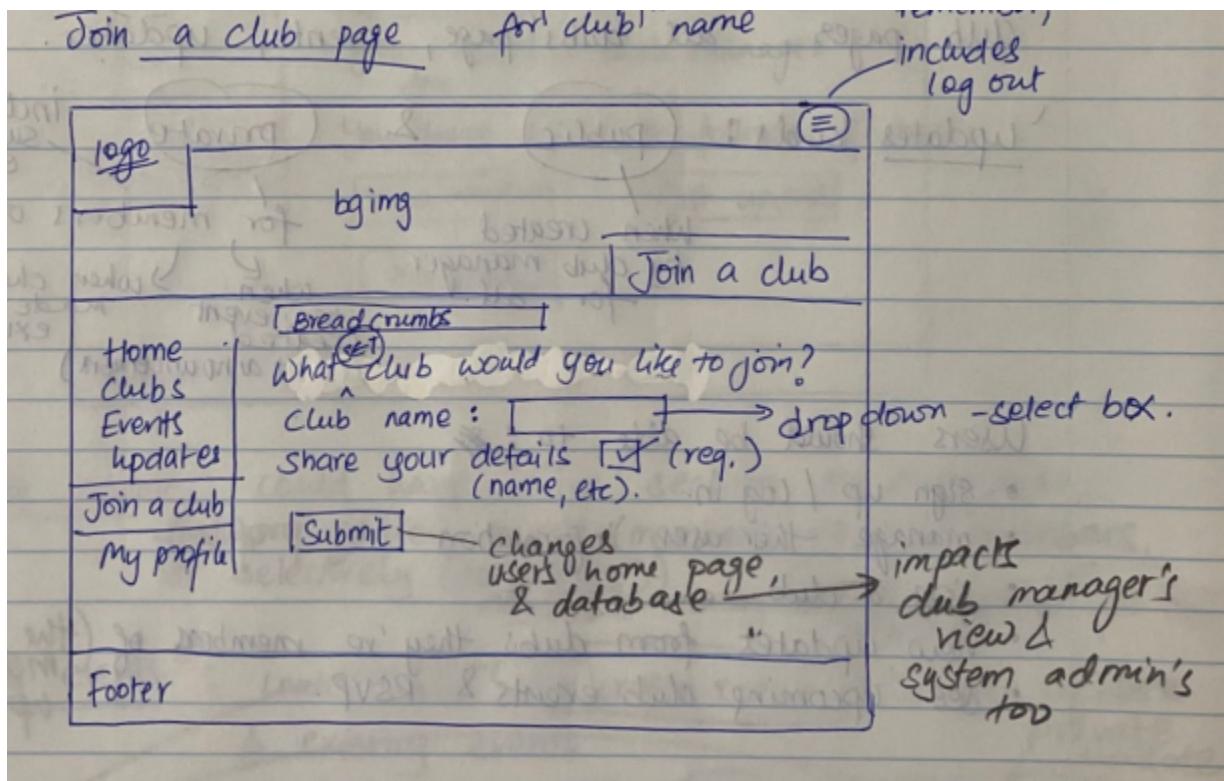
Event info / Description

- Padding top and bottom: 20 px
- Colour: inherit
- Level 4 header
- Content
 - Paragraph text, cuts off after 5 lines

RSVP

- Background colour: #000
- font-colour: #FFF
- White underline and border when hovered
- When clicked expand to show 3 options
 - Green tick. Alt=Yes
 - Red x. Alt>No
 - Orange +. Alt=Maybe
 - Shows alt text when hovered over
 - Individual button size: 30px by 30px

JOIN CLUB Page (Logged-in)



Full join club page

This page is for logged in users to find and join clubs. The basic page template is the same as previous pages.

Features and Interactions

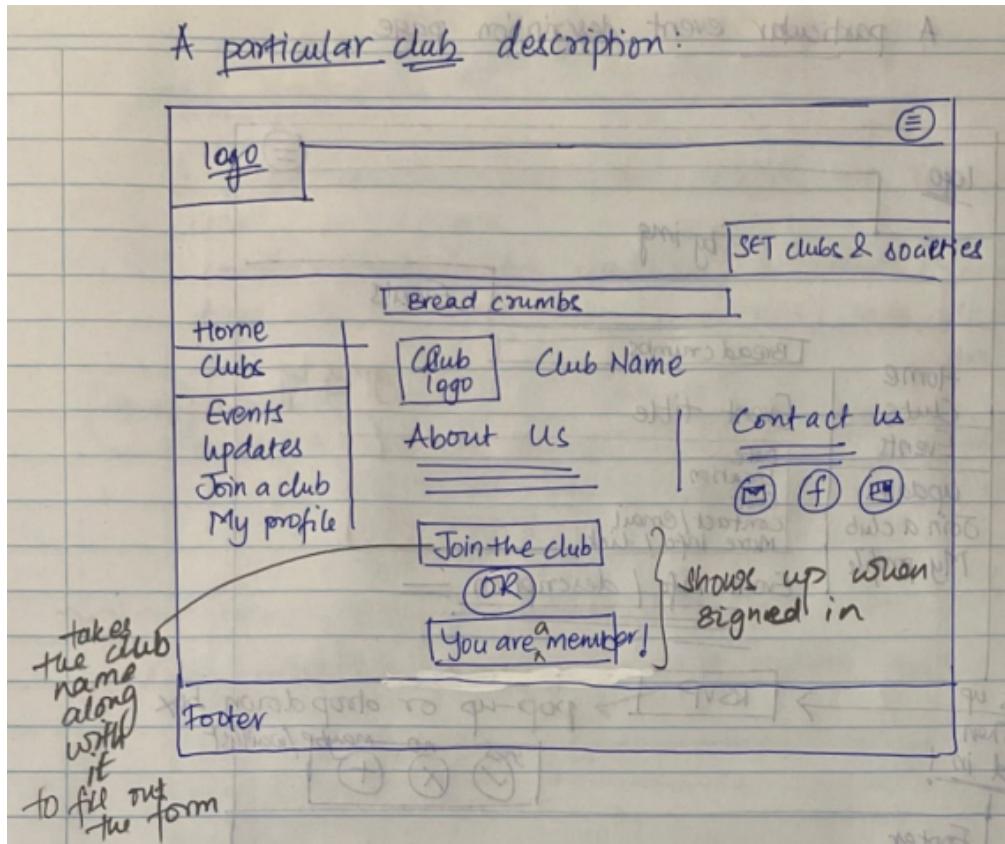
Search / Dropbox Functionality

- The user is able to both type and dropdown select to select the club they want to join
- Dropdown-select box
 - background colour: #FFF
 - Border colour: #000
 - Border size: 1
 - Height: 2em

Submit

- Form containing the dropdown-select box and checkbox
- Data is sent to server using POST when clicked
- Black background, white text.
- White underline and background when hovered

CLUB Page (Logged-in)



Full club page

This is the template for club pages. The 'About Us', 'Contact Us', club logo, club name and social media integrations are all updateable by club managers.

The 'Join the Club' changes to 'You are a member' depending on whether or not the user can sign in. The page template is the same as logged in pages.

Features and Interactions

Club Details

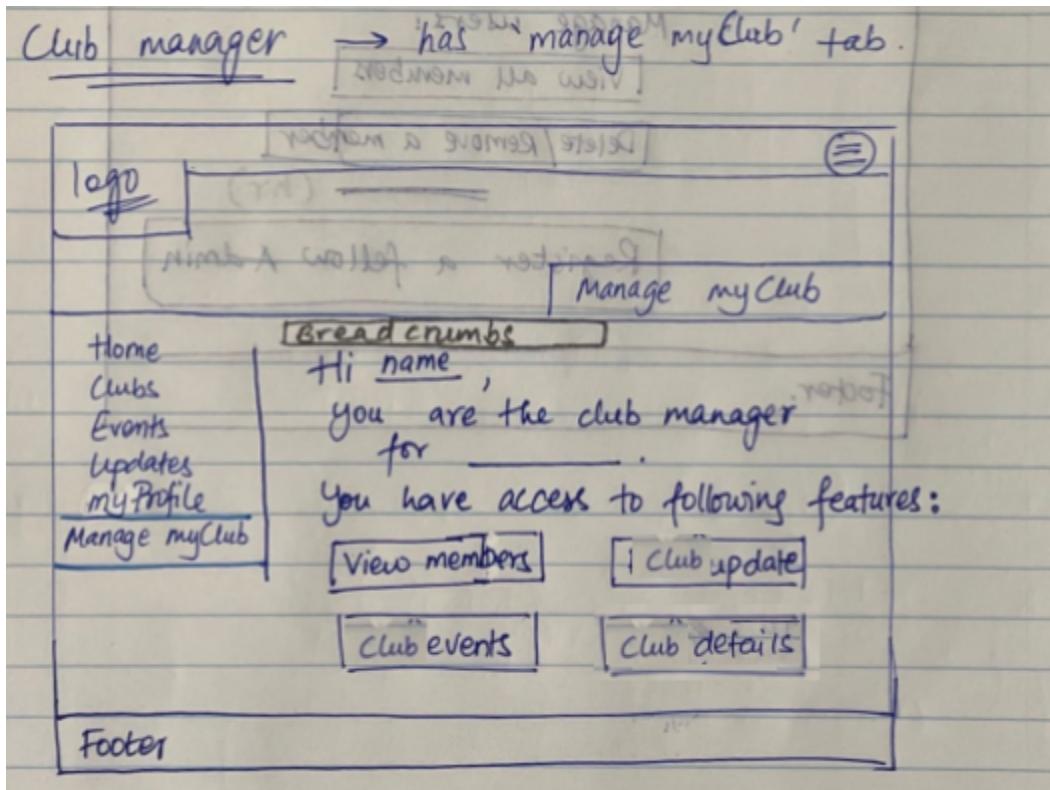
- Div section containing Club logo, Club Name, About Us, Contact Us and social media integration
 - 60 vw
- 'Club Name' is header 3 element, black, and centered in div
 - Padding: 30px
- Club Logo
 - 80 px by 80 px. Aligned left
- 'About Us' and 'Contact Us' are header 2 elements, colour inherited. Both centred in respective divs

- Padding: 20px
- Description will be paragraph text. Font-size 1 rem
- Social Media integrations will be 40px by 40px and link to the club's respective social media page

Join the Club

- Padding: 20
- Background color: #000
- Text colour: #FFF
- Font-size: 1 em
- Border colour and underline colour #FFF when hovered over
- When clicked
 - Takes to the club's signup form
 - Completion is verified, routes back to club page, and the button text now displays 'You are a member' with an arrow dropdown cue
 - When clicked, drops down with the option to leave club
 - Dropdown box is background colour is red, one option 'Leave'
 - Font properties is inherited from dropdown box
 - Upon clicking leave, it sends a web prompt with options: Yes, No.
 - If Yes, updates database and updates the page
 - If No, brings user back to page

MANAGE CLUB PAGE (Logged-in)



Full Manage Club Page

This navigation option and page is only viewable and available to a registered manager of the club. The manager will be able to access this page from the page dedicated to the club they manage. The page contains options to:

- View all members of the club
- Post and manage club updates
- Post club events
- Update club details

Features and Interactions

Viewing Page

- Check the session details of the user attempting to access this page. If they can be found in the club managers table for the club, then let them in. Otherwise, send "<h1> Access denied <h1>" as the response
- If the details are valid, then also enable viewing of the 'Manage myClub' option
 - The toggle for the viewing will be server side, not client side

View members

- Send GET request to server
- Server handles request and sends query that selects Name, Email and Username from all club members

- Respond with a page with same format (side nav, header, footer) as Manage Club page, except the main content is replaced with a table of club member names, with email and username
 - Each row is one user

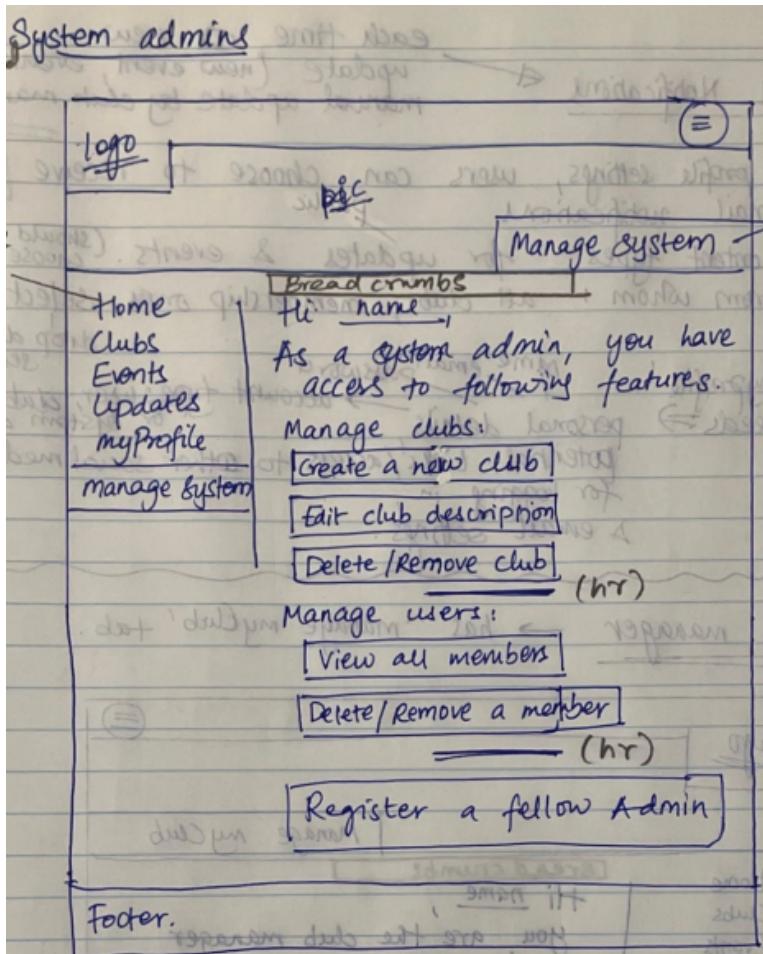
Club Update and Club Events

- Both drop down elements, with two options each:
 - Create New [Event / Update]
 - If Event
 - Responds with a Event template page, containing input labels for the labels and a blank text area for description, and a green submit button centred in the bottom of the Event Content Div
 - If Update
 - Respond with a form containing an input label for title, and a text area for content.
 - POST information to server.
 - Manage [Events / Updates]
 - If Event
 - Respond with the Event Page, with editing abilities like in Create New Event

Club details

- Respond with the club detail page, and the ability to edit the details on the page

SYSTEM ADMIN PAGE (Logged-in)



System admin page

This is a page exclusive to admins. It functions as a frontend hub to many other abilities admins have, such as creating and deleting clubs, managing users and registering other admins.

Features and Interactions

Management and Registration Buttons

- All the buttons are of equal size
 - 40% width, and 3 rem height
 - Paragraph elements within buttons, with white font colour
 - Black button background
 - White border and underline on hover
- The pages will link to a logical web page that is also only accessible to admins

REVIEW

In order to ensure a user-friendly and efficient design for our website, we conducted comprehensive usability evaluations, specifically focusing on usability heuristics, kinetic interaction, and cognitive load. We reviewed the design with thorough testing, and wherever necessary, updates were made to address identified issues. In cases where updating was not required, clear justifications have been provided. The following are the key findings and actions taken:

Usability Heuristics Evaluation:

We applied Jakob Nielsen's usability heuristics to assess the design's compliance with recognized usability principles. Through a systematic evaluation, we identified areas for improvement and made necessary adjustments to enhance usability, over the below mentioned criteria:

1. Visibility of system status: To keep users informed about what is happening through appropriate feedback and prevent errors, we have planned to add status messages and progress indicators, in case of the website loading or if the website is down.
2. Match between system and the real world: We have tried our best to use language, concepts, and conventions used by the university students, ensuring MySET matches the expectations of students looking for clubs or societies. The website design is tailored to serve the intended purpose; as per feedback, the website's look and feel matches its objective: 'mySET clubs and societies - home to UoA SET faculty's clubs and societies'. Nevertheless, to ensure this, we plan to optimize the language used in the website.
3. User control and freedom: We did not think of this before, but we want to provide users with the ability to undo or redo actions.
4. Consistency and standards: We have tried our best to be consistent throughout the website, reducing cognitive load and promoting usability. We did not have to make any changes to the plan for this, as users really appreciated the consistency with, for example, the logo and color palette.
5. Recognition rather than recall: To minimize the need for users to remember information we provide clear and visible descriptions of the website at every Club page along with instructions, prompts and notifications. Moreover, the feedback we received appreciates the use of buttons for most of the user tasks. For example: in the current design, for most of the tasks, the users have to operate with intuitive buttons. Hence, no changes were required.

6. Flexibility and efficiency of use: We want to design the website to cater to both new and existing users by offering shortcuts, and customizable options to improve efficiency. We are still figuring out how to implement these.
7. Aesthetic and minimalist design: We shall keep the interface clean and uncluttered, by only presenting essential elements and information that aid user tasks and goals. Not much changes required in the plan.

Kinetic Interaction Evaluation:

From the user feedback we received, we came to know that the buttons we use contribute to reducing the Kinetic Load. As per our plan, for most of the tasks, users have to operate with intuitive call-to-action elements. For example, the login page is just a button click away on the HOME Page.

Moreover, we shall ensure that the interactive elements and animations in the user interface provide a natural and engaging user experience as we develop it. We plan to assess the Kinetic Interaction Evaluation by evaluating how well the interactions align with users' expectations, how smoothly they respond to user input, and how effectively they communicate information or feedback.

We shall assess the website on these parameters:

Responsiveness: By evaluating how quickly and accurately the interface responds to user input. This includes evaluating the speed of transitions and visual feedback to ensure a seamless and immediate response.

Fluidity: Assessing the smoothness and continuity of interactive elements such as scrolling, swiping, or dragging should feel natural and effortless, without any jerky or laggy movements.

Intuitiveness: Determining whether the interactive elements align with users' mental models and expectations. Users should easily understand how to interact with the interface and predict the outcome of their actions. We see this as the most important factor for MySET as we want this to present as a service to the students.

Based on our evaluation findings, we shall make adjustments or improvements as we go to ensure a more intuitive, responsive, and enjoyable user experience.

Cognitive Load Evaluation:

We conducted assessments to minimize cognitive load and optimize information processing in our website design. Updates were made to simplify complex information, streamline navigation, and reduce unnecessary cognitive burden on users.

User feedback indicates that our current design has a relatively low cognitive load. Users are able to comprehend the content, locate desired information, and complete tasks efficiently. The HOME page features a clear and organized layout with minimal distractions. It provides concise instructions and uses simple language to guide users through the website and tasks.

Furthermore, unnecessary pages and elements were removed based on our evaluations, reducing cognitive load and focusing on essential information and features.

To minimize cognitive load, we employed the following strategies:

1. Easy Completion of Actions: Actions are made easy to perform, such as through prominent buttons, simplified forms, or highlighted links.
2. One Action Per Webpage: Each web page focuses on a primary action, making it clear to users what they should prioritize.
3. Purposeful Visuals: Visual elements, such as photography, illustrations, and icons, were carefully chosen to align with the page's goals and support user understanding.
4. Building on Web Standards: We drew inspiration from successful websites and followed established web design standards to ensure familiarity and ease of use for users.
5. Page Structure: We utilized structure in our pages, including headlines, sub-headlines, bullet points, and numbered lists to break up large blocks of text and improve readability.
6. User Testing: We conducted testing with users to gather feedback, identify areas of high cognitive load, and refine the design based on their insights.
7. Concise Content: We aimed for brevity and clarity in our content, eliminating unnecessary text and reducing word count through thorough editing.

By implementing these strategies and continuously seeking user feedback, we aim to create a website with reduced cognitive load, allowing users to navigate, understand, and interact with ease. Apart from the factors discussed above, we have identified several areas for improvement that will be addressed after the Milestone 1 Submission. These areas include:

1. Responsive Design: The current code has some bugs, causing inconsistent element layouts on different screen sizes. We will work on making the website responsive and ensuring elements display properly across various devices.
2. Setting Max-Width for Divs: Currently, the divs expand to fit the page as the screen size increases. We will implement a max-width setting to prevent excessive spreading. This will also help in displaying limited content on the "upcoming events" and "important updates" sections, improving their visibility and accommodating a growing number of events and updates. We plan to showcase a few events and updates on the home page while providing separate web pages for displaying all events and updates.
3. Streamlining Navigation: To reduce cognitive load and enhance the user experience, we will implement a logical and intuitive navigation structure. This will include clear menus and breadcrumbs to assist users in finding their way around the site more easily. We would create an accordion list to implement our navigation menu.
4. Improving Readability: We will focus on enhancing the readability and decipherability of text content on the website. To break the monotony of text blocks, we will introduce suitable formatting elements such as headings, subheadings, bullet points, and paragraphs. This will help users to better navigate and engage with the textual information.
5. Text Emphasis and Decoration: To enhance the visual appeal and highlight important information, we will employ appropriate text emphasis techniques, such as bolding, italics, or underlining, as per the requirement. This will improve the readability and draw attention to key points.
6. Styling of Horizontal Rule: Based on feedback, we will modify the styling of the horizontal rule to avoid any confusion. The current dotted design may give the impression of cut-off text, leading users to click on it for expansion. We will explore alternative designs or styles that provide a clear visual separation without creating unnecessary interaction expectations.

By addressing these areas of improvement, we aim to create a more user-friendly and visually appealing website that enhances the user experience, reduces cognitive load, and ensures consistency across different screen sizes and devices. Thoroughly evaluating and addressing these aspects, we shall ensure that our design is user-centered, intuitive, and optimally supports users' needs and goals. These considerations contribute to an enhanced user experience and facilitate efficient interaction with our website.

DATA PLAN

The data plan, documented in an Excel sheet ( mySET_data_plan.xlsx), outlines all the interactions between the client and server, specifies the data to be sent, defines storage methods, and outlines necessary processing steps.

By adhering to this data plan, we will be able to handle data effectively, ensuring data accuracy, security, and seamless integration between the client and server components.

 mySET_data_plan.xlsx

<https://docs.google.com/spreadsheets/d/1SJ6ep2LVMmT9hb8cRhP63N4NjS0vvTfS/edit?usp=sharing&ouid=100950841445300283055&rtpof=true&sd=true>

DATABASE SCHEMA

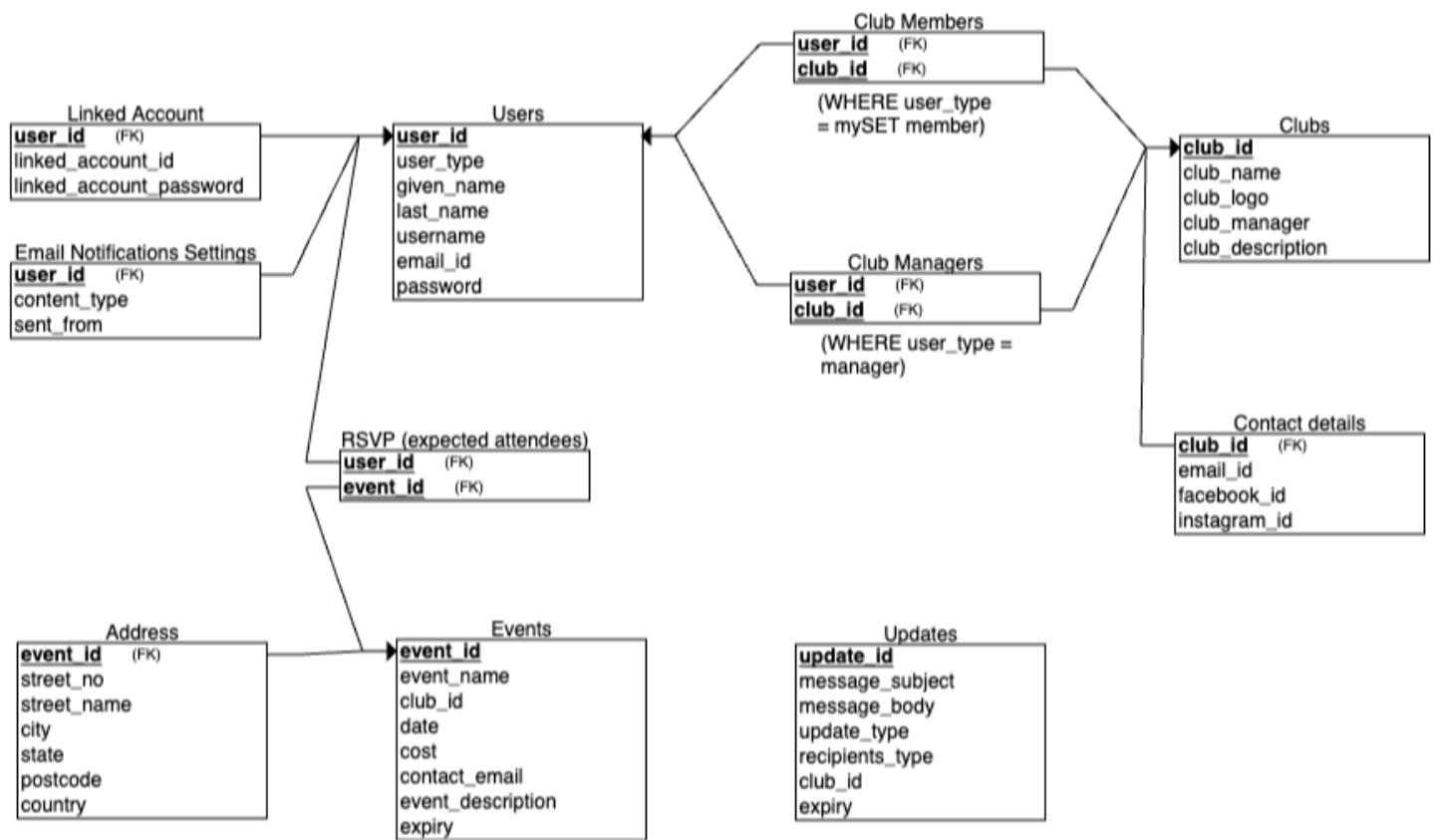
Our database schema is in the 4th normal form, and has been carefully designed to include all the necessary components.

The schema diagram below provides a detailed and valid representation of the database structure. It encompasses four main tables: Users, Clubs, Events, and Updates. Each table is appropriately defined with its respective attributes, relationships, and keys. The schema diagram effectively captures the cardinality of relationships, clearly indicating which attributes are involved and how they are connected.

In addition to the main tables, we have also incorporated three essential bridge tables: Club Members, Club Managers, and RSVP. These bridge tables facilitate the relationships between users, clubs, and events, enabling efficient data management and retrieval.

By adhering to the principles of normalization, our database schema ensures data integrity, minimizes redundancy, and improves overall database performance.

With a comprehensive and well-structured database schema in place, we can effectively store and manage all the relevant data related to users, clubs, events, and updates. The schema provides a solid foundation for future implementation of data operations, such as querying, updating, and retrieving meaningful insights from the database.



IMPLEMENTATION

We have made progress in the implementation of multiple pages. We are well on track to successfully complete the development of our website with all its features to a high degree of quality. Although the supportive pages, such as the "Important Updates" page and the "Upcoming Events" page, are not yet linked to the Home Page, we have planned and scheduled their implementation in the upcoming days.

Our current focus has been on the client-side implementation, where we have diligently worked on writing the necessary HTML and CSS code to create a visually appealing and user-friendly interface. We hope this fundamental code implementation demonstrates our commitment to this project and delivering a robust website.

A few of the supportive pages are still in progress. We acknowledge the need to write more JavaScript code to enable the functionality of linking these pages to the Home Page. This is on top of our to-do list. Eventually, we will enhance the user experience by providing seamless navigation and access to important sections of the website.

In parallel with the client-side implementation, we are also planning and preparing for the backend code implementation. This will involve developing the necessary server-side logic, database integration, and data processing functionality, which will help us put together a dynamic website with custom pages.

By having a clear roadmap for the upcoming tasks and actively working on the implementation of both client-side and backend components, we are confident in our ability to successfully deliver a fully functional and feature-rich website. Our team is dedicated to ensuring a high degree of quality in the implementation process, adhering to best practices, and continuously iterating based on feedback from users.

In conclusion, we have made decent progress in the client-side implementation and look forward to our next steps that include incorporating more supportive pages and enabling backend functionality. We hope this demonstrates our commitment to delivering a robust and polished website that meets the requirements and expectations of our users.

Thanks for reading!
You have a lot of
patience!!