

Activity 3: Exploration of Design Alternatives

3.1 Understanding Tasks and Context

In order to prioritise the user's reality and build the application around the user first, we developed storyboards to illustrate the context of use. The following storyboard depicts the primary problem: a student struggling to find meaningful connections despite having access to information, highlighting the need for a solution that bridges the gap between digital discovery and real-life interaction.

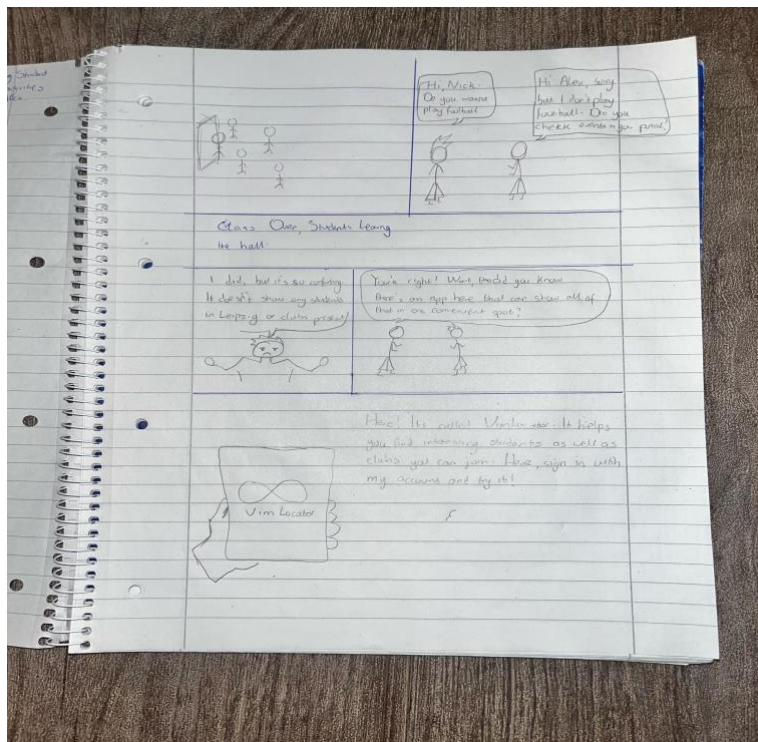


Figure 3.1: Storyboard illustrating the user journey

3.2 Exploration of Design Alternatives

We conducted a brainstorming session with the team to generate various approaches to solving the defined problem. In accordance with the project requirements, we explored multiple strong design alternatives and one intentionally poor design to highlight necessary usability constraints.

Design Alternative 1: The "Data-Heavy" Approach (Intentionally Poor Design)

This design focused on maximising information density. It featured a text-based interface that presented club names and extensive descriptions in a raw format, with an infinite scroll. It lacked imagery and interactive elements.

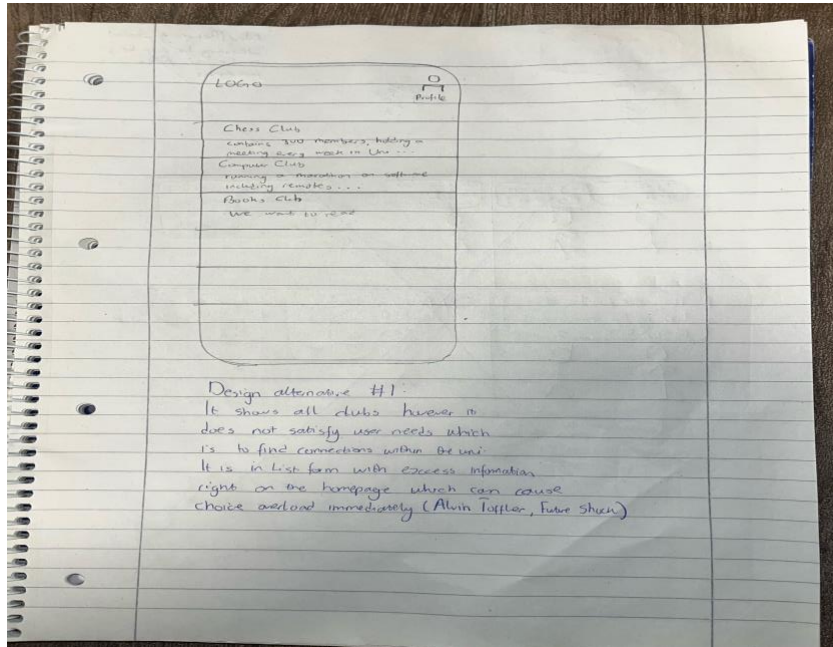


Figure 3.2: Intentionally Poor Design Alternative

- Critique: We rejected this design as it violates the Aesthetic-Usability Effect, which states that users perceive aesthetically pleasing designs as more usable (Nielsen Norman Group, 2017). Furthermore, the wall of text induces a high cognitive load, and the lack of hierarchy makes scanning impossible. The design fails to promote social connection, acting merely as a static database.

Design Alternative 2: The "Visual Feed" Approach

This alternative incorporated high-quality imagery, featuring photos of clubs chosen by members to create visual appeal. Like the first design, it utilised an infinite scroll mechanism to display content.



Figure 3.3: Visual Feed Design Alternative

- Critique: While visually superior, the infinite scroll mechanism was deemed problematic for our specific goal. Research suggests that infinite scrolling encourages passive consumption ("doom-scrolling") rather than decision-making (Loranger, 2014) (Nielsen Norman Group, 2015). Our primary objective is to promote real-life connections; a system designed to keep users glued to the app for extended periods conflicts with this goal.

Design Alternative 3: The "Directory/List" Approach

This alternative design explored a structured, searchable list view that focused on utility and categorisation rather than discovery.

Figure 3.4: Directory Design Alternative <<insert image of a third sketch here - e.g., a simple list or map view>>

Design Alternative 4: The "Connection-First" Approach (Selected Design)

This design prioritises user agency and connection. It utilises a "profile card" interface as the landing page, allowing users to view other students or clubs one at a time. It uses

swipe gestures (right to indicate interest, left to refute) to manage interactions.

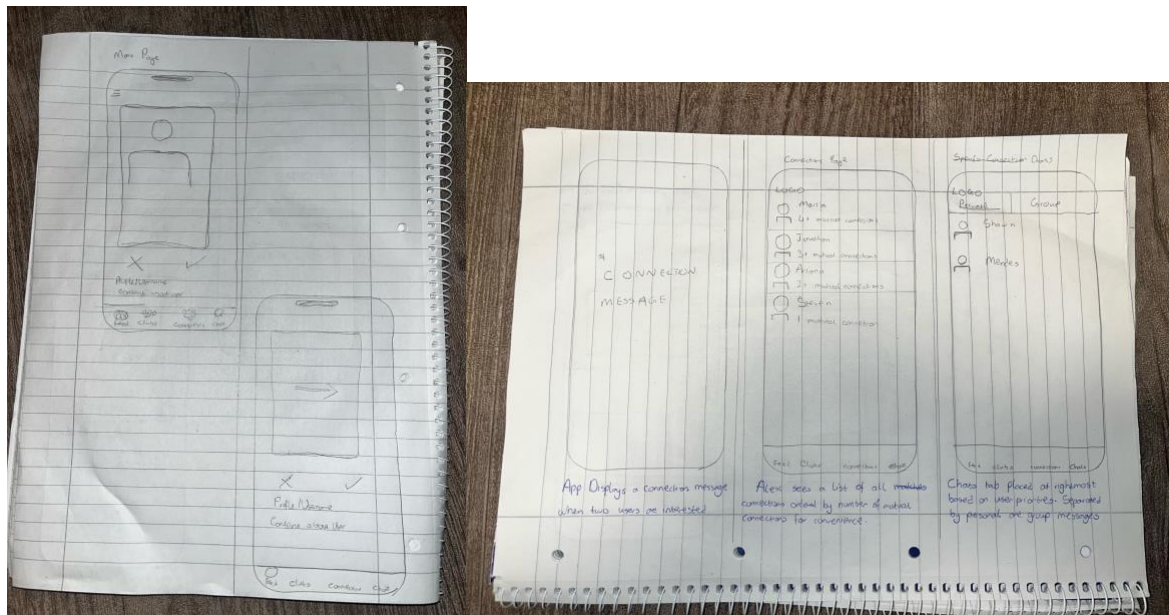


Figure 3.5: Connection-First Design Alternative

- Critique: This design aligns with Jakob's Law, which suggests users prefer your site to work the same way as all the other sites they already know (Nielson, n.d.) By adopting the "swipe" metaphor common in connection apps (like Bumble or Tinder), we reduce the learning curve. It forces a binary decision (interested/not interested), which encourages active engagement rather than passive scrolling.

3.3 Low-Fidelity Prototyping and Scope

We translated our conceptual ideas into tangible representations using paper-based low-fidelity prototypes. Reference: Nelsoncom, Social Syndication, Digital Communications, Transactions. <https://icommunicationsandmarketing.com/landing-page-1018/>

Scope and Resolution Justification: We chose a horizontal scope for our low-fidelity prototypes to demonstrate the breadth of the system's features (Feed, Clubs, Connections, Chats) rather than the depth of a single function.

- Paper Prototypes: We utilised hand-drawn sketches for the initial iteration. This enabled rapid visualisation and low-cost discarding of poor ideas. See Figure 3.5

- Figma Lo-Fi: We transitioned to a digital low-fidelity version in Figma to test basic navigation flows before investing in high-fidelity assets.



Figure 3.7: Figma Low-Fidelity Screens

3.4 Formative Evaluation and Iteration

We conducted a formative evaluation by reflecting on the design alternatives and refining the user interface based on user requirements gathered in Activity 2, ensuring the final design effectively meets user needs.

We proceeded with Design Alternative 4 (Connection-First) because it directly addresses the core user need for active connection, ensuring the design promotes meaningful social interactions rather than passive information browsing, which aligns with our project goals and stakeholder expectations.

Navigation Design Rationale: A key iteration involved reordering the bottom navigation bar. The final structure is ordered Left-to-Right: Feed | Clubs | Connections | Chats.

1. Prioritisation of Chats: Our survey data indicated that "Chats" was the second most important user request. We placed this on the far right of the navigation bar. This decision is supported by the Serial Position Effect, which suggests that users best remember the first and last items in a series (IxDF - Interaction Design Foundation, 2016).

By placing the Feed (discovery) first and Chats (communication) last, we anchor the most critical user journeys.

Placing these core features in a bottom tab bar adheres to Fitts's Law. It supports accessibility by ensuring that the most frequently accessed targets are within easy reach of the user's thumb, facilitating usability for users with varying physical abilities and device sizes.

Bibliography

IxDF - Interaction Design Foundation. (2016). *What is Serial Position Effect?* Retrieved from <https://www.interaction-design.org/literature/topics/serial-position-effect>

Loranger, H. (2014). *Nielson Norman Group*. Retrieved from <https://www.nngroup.com/articles/infinite-scrolling/>

Nielson, J. (n.d.). Retrieved from Nielson Norman Group: <https://www.nngroup.com/videos/jakobs-law-internet-ux/>

Prototype Link: <https://www.figma.com/design/Sob3Ze3WVWS47Z84Mleigl/VimLocator-1?node-id=0-1&t=HXjwn0TytMDo1BbY-1>