HarmonyHub: Nurturing Mental Wellness Through Digital Connection at UCD



Acol N. Mhurchu, Charvi Khandelwal, Chongyi Fan, Fang Xu, Hairuo Hou, Han Li, Pushkar Chavan, Xiaohui Sun, Yaoxi Sun

Introduction

Addressing escalating mental health challenges, this app is designed to nurture meaningful relationships and provide academic support. HarmonyHub goes beyond being just an app. It's a promise to foster a supportive and interconnected community, focusing on empowering students and enhancing their well-being.

Requirement Gathering

The following steps were undertaken as part of the research gathering.

- Literature Review: On college student's mental health trends and technology's role.
- Student Surveys: Assessed mental health, digital habits, and, needs of UCD students.
- Focused Interviews: In-depth understanding of students' experiences and preferences.
- Expert Consultation: Sought insights from professionals to enhance app features.
- Market Analysis: Reviewed existing apps for gaps and opportunities.

The following results and action items were observed:

- Leveraging social media: To maximize reachability and accessibility.
- Fostering digital communities: To increase engagement and similar connections.
- **Impact of learning environment**: Non-native environment combined with social issues affects mental health.
- Integrating academic and social features: Better tailored to UCD students

Lo-fi Prototype

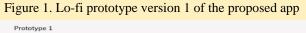




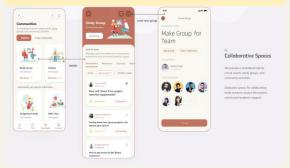
Figure 1. Lo-fi prototype version 2 of the proposed app



Hi-fi Prototype

Key Features:

Figure 2. Community aspect of HarmonyHub



- Unique matching algorithm for pairing students based on academic and personal interests.
- Dedicated spaces for collaborative study, project discussions, and academic support.
- Emotional support networks for sharing experiences and mutual assistance.
- Central hub for virtual events, study groups, and community activities.

Onboarding:

Download, install, and create an account with UCD email.

- **Profile Building**: Set academic interests, learning preferences, and personal bio.
- **Home Screen**: Access matches, explore connections, and join learning groups.
- **Interaction**: Initiate chats, schedule virtual sessions, and join or create study groups.
- **Community Engagement**: Participate in events and access mental health resources.
- Continuous Support: Provide app feedback and access customer support as needed.

Figure 3. HarmonyHub dashboard



Evaluation

Assessed using Jakob's Ten Usability Heuristics, with improvements identified in:

- System Status Visibility: Enhance guiding information on the landing page for better user orientation.
- Consistency and Standards: Adjust chat feature ordering and unify terminology for intuitive navigation.
- **Minimalist Design**: Reduce content overlap between EventHubs and Community pages for clarity.
- Rating System Impact: The rating system in the matching algorithm could negatively affect mental health, leading to anxiety and comparison among users. Suggestion: Consider removing or modifying the rating system to prevent potential harm.