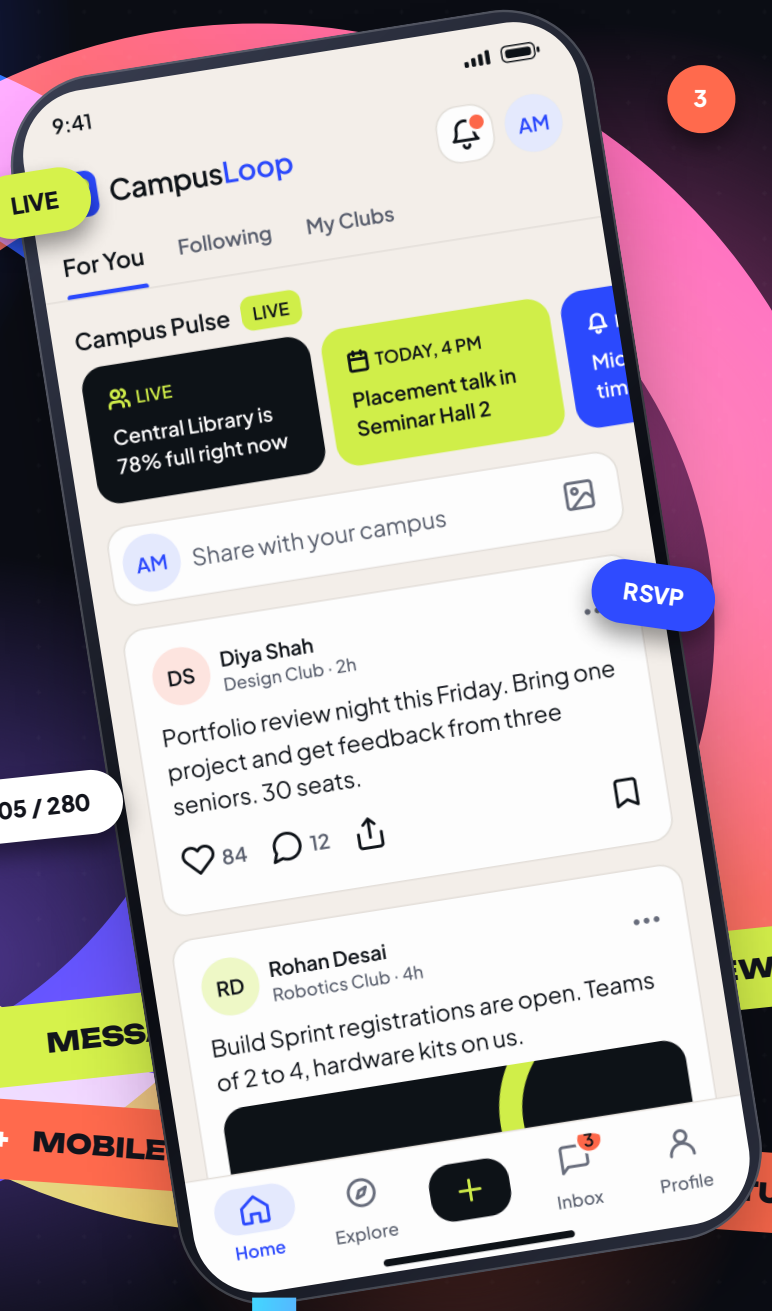
ITM SLS BARODA UNIVERSITY
UI/UX Project Based Learning · Report

PBL UX/UI Case Study

Mobile · 390 × 844



UI/UX + PBL + CASE STUDY + CAMPUSLOOP +

POSTS

PBL + CASE STUDY + CAMPUSLOOP + MOBILE

CampusLoop

A mobile campus community app

News, clubs, events, posts and conversations, closed into one loop.

Submitted by **Maher Bhatt**	Enrollment No. **25C21007**	Semester **3**
Submitted to		Date of submission

Contents

Ten sections, in the order the brief asks for them. Each section has its own colour.

01 **Project Title** — What CampusLoop is, in one page — 03

02 **Introduction** — The problem and the idea — 04

03 **Objectives** — Eight goals the design had to meet — 05

04 **System Flowchart** — How a student moves through the app — 06

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09 **Tools and Technologies** — What the work was built with — 20

10 **Conclusion** — What was learned, what comes next — 21

Project Title

CampusLoop

PBL UX/UI Case Study

A mobile-first campus community application that brings campus news, clubs, events, posts and student conversations into a single, easy-to-use interface.



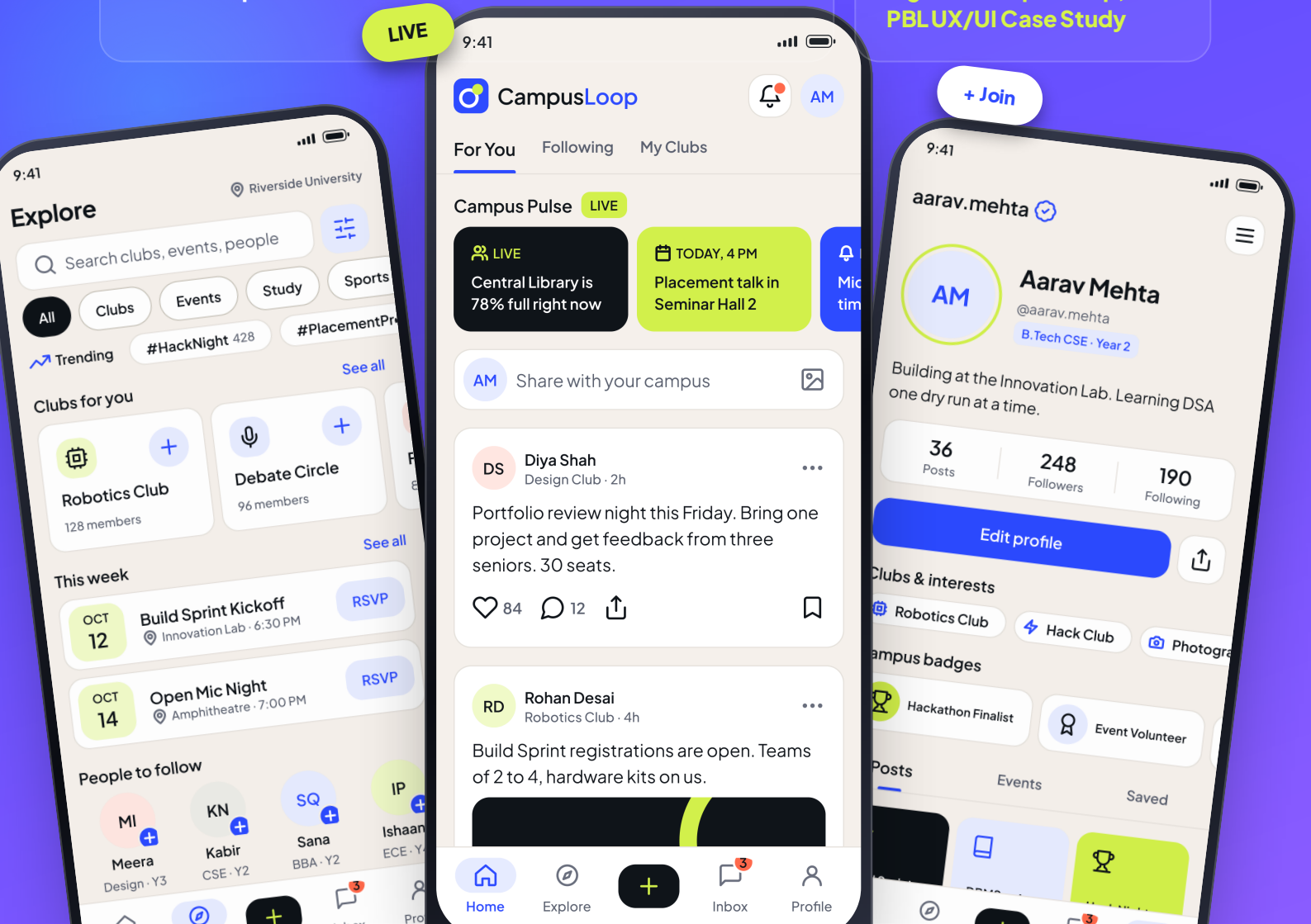
Project type
UI/UX case study (mobile app design)

Platform
Mobile, iOS-style frames, 390 × 844 px

Designer
Maher Bhatt
Enrollment No. 25C21007

Screens designed
Home · Explore · Create Post · Inbox · Profile

Design file
Figma: CampusLoop, PBL UX/UI Case Study



02

Introduction

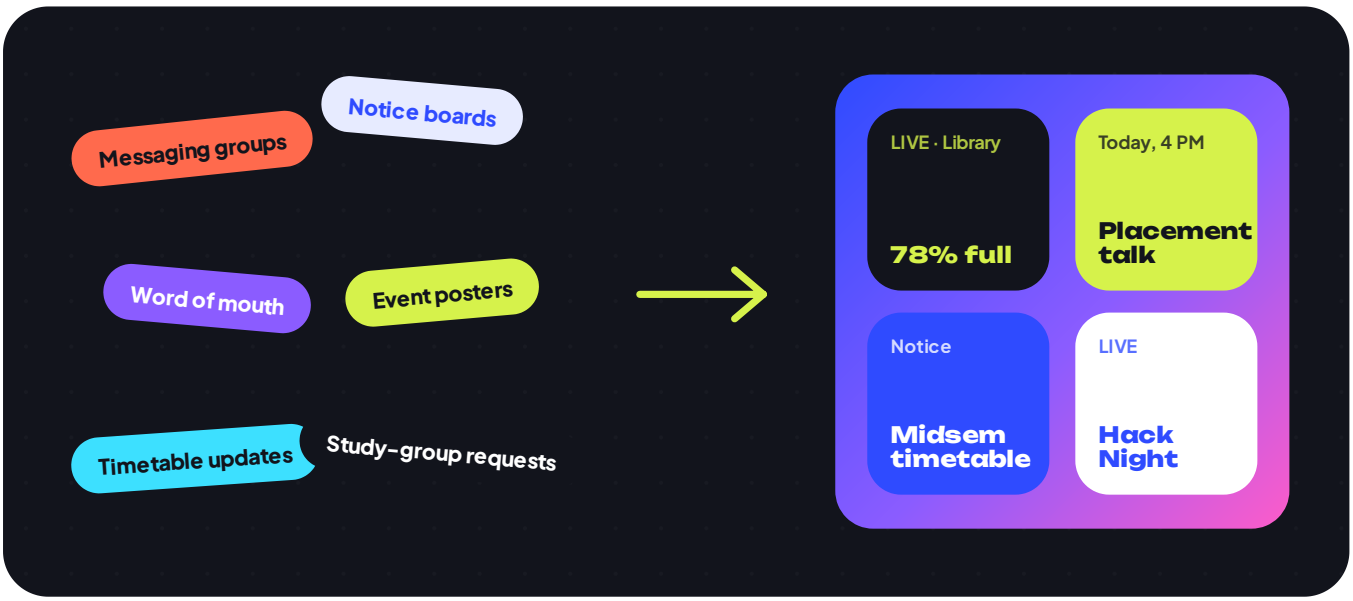
PROBLEM + SCATTERED INFO + ONE LOOP + CAMPUS PULSE + ONE PLACE + THE PROBL

INTRODUCTION + 02 + CAMPUSLOOP +

Campus information is scattered. CampusLoop closes the loop.

A college campus produces a constant stream of information: club announcements, event posters, placement talks, timetable updates, study-group requests and personal conversations. In most campuses this information is scattered across messaging groups, notice boards and word of mouth, so students often miss things that matter to them.

CampusLoop is a mobile app concept that gathers this activity into one place. A student opens the app and immediately sees a live "Campus Pulse" (short updates such as library occupancy, a placement talk or a published timetable), a feed of posts from the clubs and people they follow, and a bottom navigation bar that leads to discovery, posting, messaging and their own profile.



Before: information in six places. After: one Campus Pulse.

This report documents the user experience and user interface design of CampusLoop: the flow of the system, the users and their goals, how data moves through the product, the design process, the design system, and the final screens.

03

Objectives

OBJECTIVES + 03 + EIGHT GOALS +

ALS + ONE PLACE + PULSE FIRST + EASY DISCOVERY + POST FAST + ONE SYSTEM + 8

One place for campus life

Bring campus news, clubs, events and conversations into one simple, mobile-friendly experience.

Pulse first

Surface time-sensitive information (Campus Pulse) at the top of Home so students see it first.

Easy discovery

Search, category filters, trending hashtags, club suggestions and "people to follow".

Post in seconds

Optional photos, a community, an event, a location and an audience, so posts reach the right people.

A clean inbox

Direct and group conversations, including message requests.

A profile that says who you are

Identity, clubs and interests, campus badges, posts, events and saved items.

One design system

Reusable colors, typography, spacing, icons and components, so every screen looks and behaves the same way.

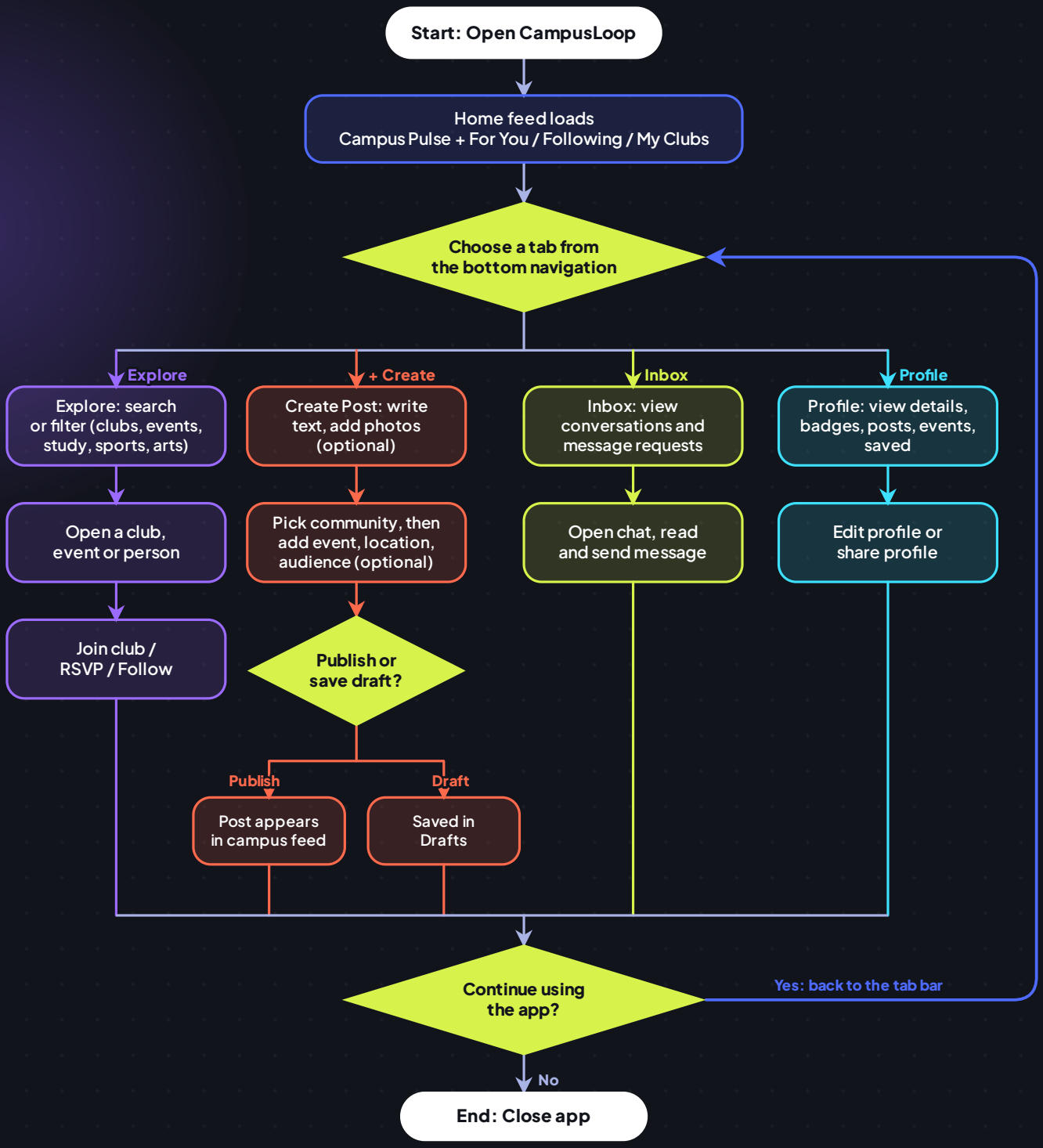
40–48 px

Usability first

Follow good usability principles: clear hierarchy, readable type, adequate touch targets and consistent navigation.

04 System Flowchart

After launch, Home loads. The bottom bar branches to Explore, Create Post, Inbox or Profile, and every branch returns to one decision: keep using the app, or close it.



Explore
Search or filter, open a club, event or person, then join, RSVP or follow.

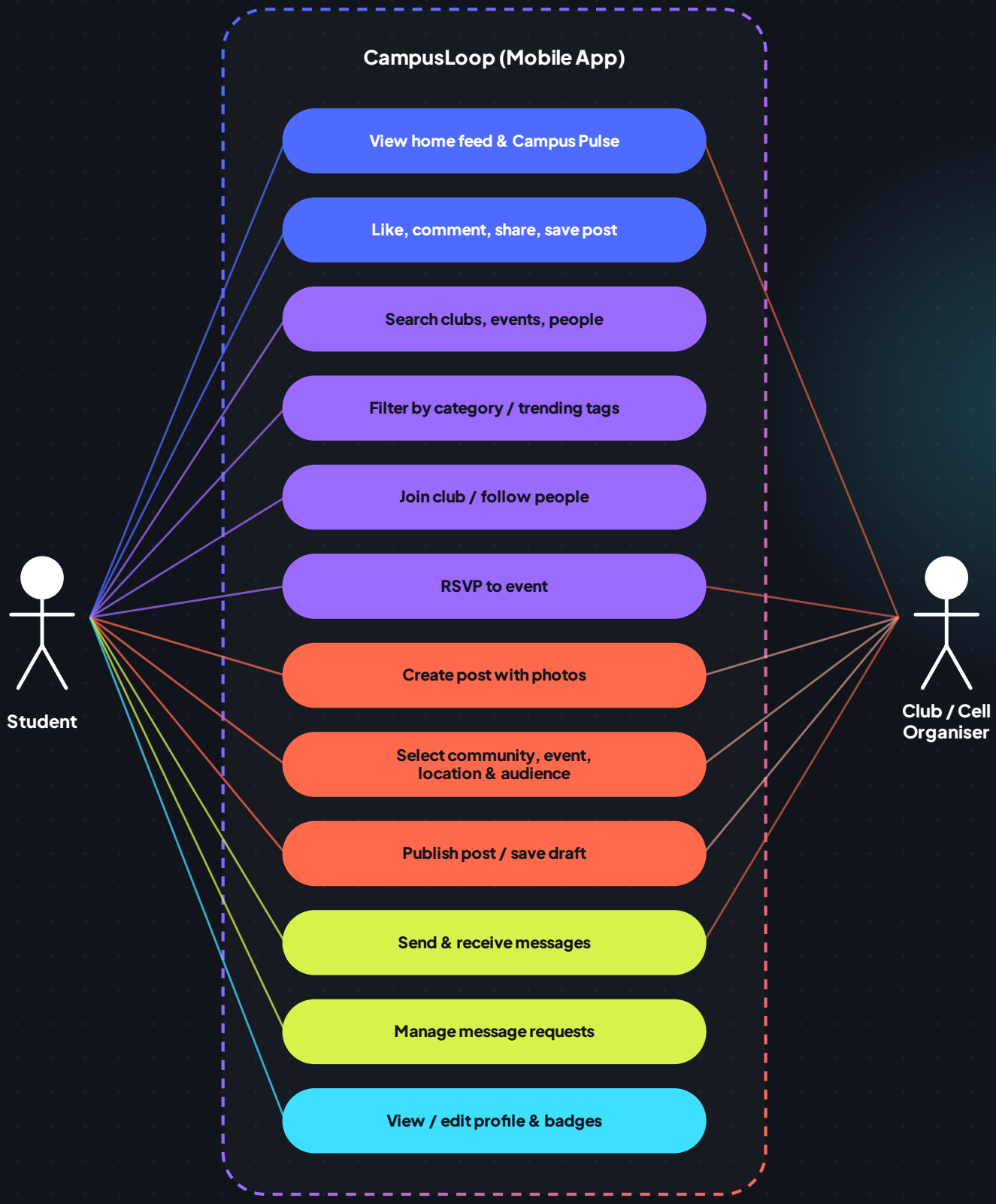
Create Post
Write text, optionally add photos, choose a community, add event, location and audience, then publish or save a draft.

Inbox
View conversations and message requests, open a chat and send a message.

Profile
View details, badges, posts, events and saved items; edit or share the profile.

05 Use Case Diagram

Two actors: the Student, who is the primary user, and the Club / Cell Organiser (for example Robotics Club or the Placement Cell), who publishes announcements and events.



Student: all use cases. Organiser: posts announcements and events, views RSVPs, and messages students.

Colour = screen Home Explore Create Post Inbox Profile

Use case catalogue

Every use case in the diagram, who performs it, which screen it lives on and what it does.

12 use cases

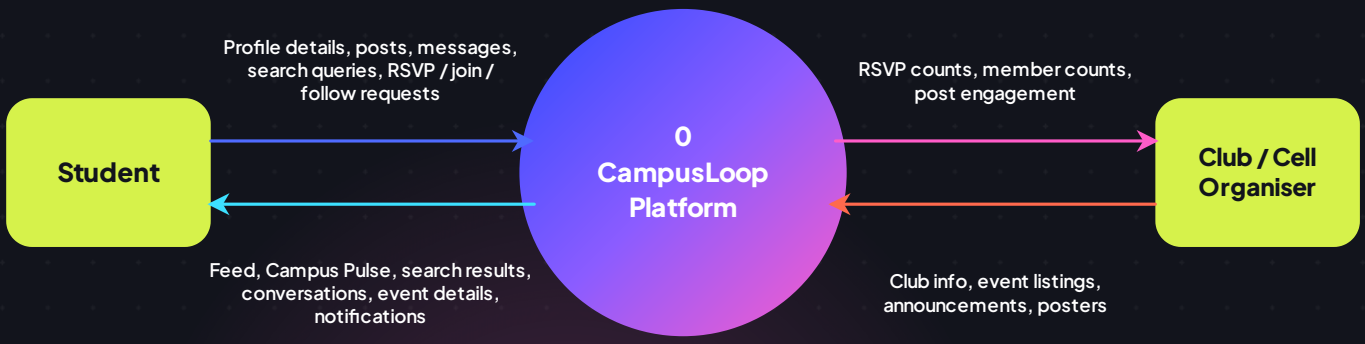
2 actors

5 screens

View home feed & Campus Pulse	Student, Organiser	Home	See live campus updates and posts in the For You, Following and My Clubs tabs.
Like, comment, share, save post	Student	Home	Interact with posts using the action row on each post card.
Search clubs, events, people	Student	Explore	Use the search field on Explore to find campus content.
Filter by category / trending tags	Student	Explore	Use chips (All, Clubs, Events, Study, Sports, Arts) and hashtags such as #HackNight.
Join club / follow people	Student	Explore	Join clubs from club cards and follow people from person tiles.
RSVP to event	Student, Organiser	Explore	Student RSVPs to events; organiser sees the response count.
Create post with photos	Student, Organiser	Create	Write a post (with a character counter) and add up to 4 images.
Select community, event, location & audience	Student, Organiser	Create	Control where the post appears and who can see it, with a reach preview.
Publish post / save draft	Student, Organiser	Create	Publish to campus or keep the post in Drafts.
Send & receive messages	Student, Organiser	Inbox	Chat one-to-one or in groups from the Inbox.
Manage message requests	Student	Inbox	Review requests from people not yet in the student's contacts.
View / edit profile & badges	Student	Profile	See posts, events, saved items, clubs, interests and campus badges; edit or share the profile.

06 Data Flow Diagram (DFD)

6.1 Level 0, the context diagram. CampusLoop is one process that exchanges data with two outside entities: the Student and the Club / Cell Organiser.



Student → CampusLoop
Profile details, posts, messages, search queries, RSVP / join / follow requests.

CampusLoop → Student
Feed, Campus Pulse, search results, conversations, event details, notifications.

Organiser → CampusLoop
Club info, event listings, announcements, posters.

CampusLoop → Organiser
RSVP counts, member counts, post engagement.

Two kinds of people. One platform. Four places where data is kept.

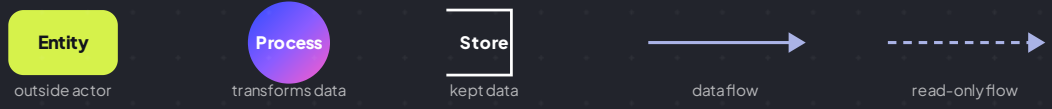
D1 Users
Names, handles, bios, clubs, interests and badges.

D2 Posts
Posts, likes, saves and drafts.

D3 Clubs & Events
Clubs, events, memberships and RSVPs.

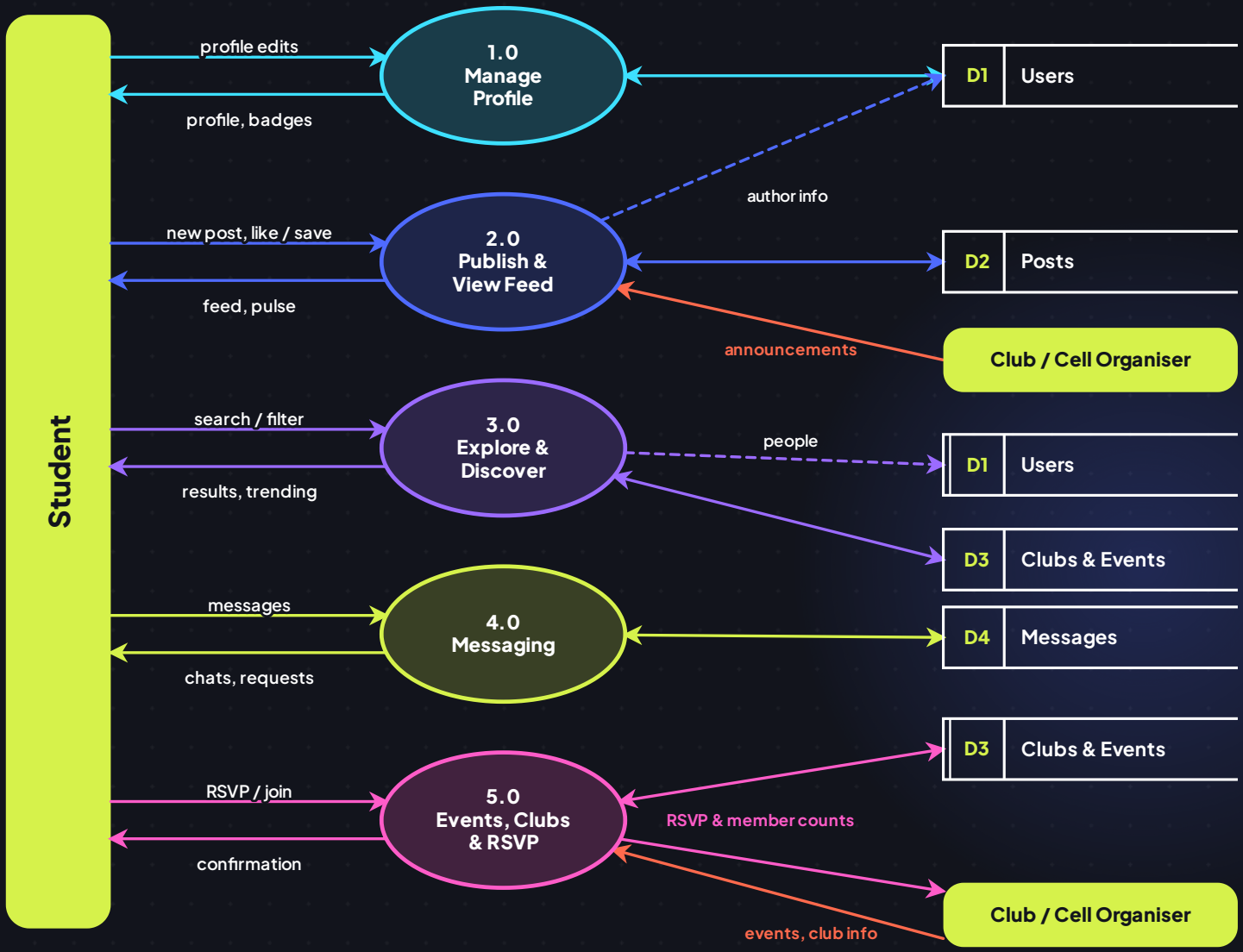
D4 Messages
Conversations and message requests.

How to read the diagrams



06 DFD Level 1

6.2 The platform split into five processes. Each one reads from and writes to its own data store. D1 and D3 appear twice so that no flow line has to cross another.



1.0	**Manage Profile**	Maintains name, handle, bio, clubs, interests and badges (D1).
2.0	**Publish & View Feed**	Stores new posts (D2) and builds the Home feed and Campus Pulse.
3.0	**Explore & Discover**	Handles search, filters, trending tags and suggestions from D3 and D1.
4.0	**Messaging**	Stores and retrieves conversations and message requests (D4).
5.0	**Events, Clubs & RSVP**	Manages clubs, events, memberships and RSVPs (D3).

07

Design Process

ERSTAND + DEFINE + PLAN + SYSTEM + SCREENS + REVIEW + U… TAND + DEFIN

DESIGN PROCESS + 07 + SIX STEPS +

The design followed the standard UX stages: understand the users, define the problem, plan the structure, build a design system, design the screens and review them for consistency and usability.

1 **Understand users**
The target users are college students who want to stay updated on campus life.

2 **Define the problem**
Scattered information, difficulty finding relevant clubs and events, and slow, unstructured ways to share a study meet-up or an event.

3 **Plan the structure**
Flowchart, use cases and data flow diagrams, plus a five-item bottom navigation.

4 **Build a design system**
Variables for color, spacing and radius, text styles and reusable components in Figma.

5 **Design the screens**
Five connected screens, all built from the same components.

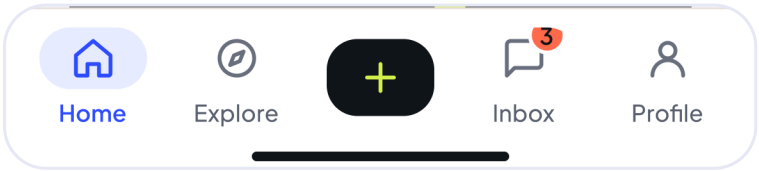
6 **Review**
Check every screen for consistency and usability.

AM

Sample persona
Aarav Mehta
B.Tech CSE, Year 2

Active in the Robotics and Hack clubs, joins study groups before exams and follows events.

- Scattered information
- Hard to find clubs and events
- Slow meet-up sharing



Information architecture

Five bottom-navigation items: Home, Explore, a central “+” Create button, Inbox and Profile. The most frequent action, posting, sits in the center. The active tab gets a soft blue pill, and an unread badge on Inbox shows pending messages.

Color tokens

Before any screen was designed, a reusable design system was created in Figma using variables for color, spacing and radius, text styles and components. These are the eight color tokens.

bg/primary
#2F4BFF
Primary buttons, active states, links

bg/primary-subtle
#E7EBFF
Active tab pill, tonal buttons, avatars

bg/ink
#12141C
Dark tiles, Create (+) button, primary text

bg/accent
#D6F24B
Accent highlights, live tags, accent buttons

bg/alert
#FF6A4D
Unread dots and alert tags

bg/success
#1FA971
Online status indicator

bg/canvas
#F6F4EE
Warm app background

text/secondary
#5A6072
Secondary text and captions

Color is never alone

Color is always paired with a label or an icon. Text keeps a high contrast against both light surfaces and dark tiles.

A note on this report

Violet, cyan and pink appear in the diagrams only, to colour-code the five screens. They are not app tokens.

Type, space and shape

Typography

Plus Jakarta Sans

Display/L	Campus Pulse	Bold 32 / 40
Title/L	Explore	Bold 24
Title/M	Trending on campus	SemiBold 20
Title/S	Clubs for you	SemiBold 16
Body/L	Line-follower workshop this Saturday.	Regular 16
Body/M	Bring your laptop, we bring the kits.	Regular 14
Label/L, M, S	Publish to campus	SemiBold 16, 14, 12
Caption	2h ago · 128 members	Medium 12 / 16

Spacing

4-point scale, in px

4
8
16
24
32
40
48

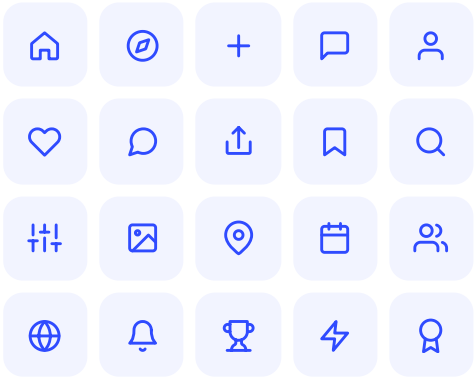
Radius

8, 16, 24 and pill

8
16
24
Full

Icons

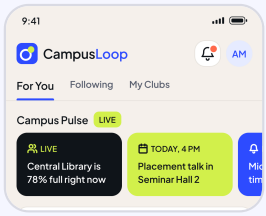
24 px, 2 px stroke, round caps. 40+ in the set.



Components

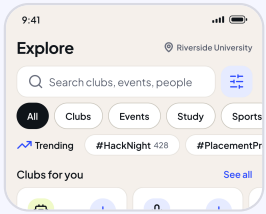
Button · Filter Chip · Tag · Avatar · Status Bar · Bottom Nav · Search Field · Section Header · Count Badge · Conversation Row · Person Tile · Post Card · Club Card · Event Row · Pulse Tile

Screen decisions and usability



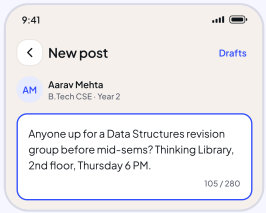
Home

Feed tabs (For You, Following, My Clubs) sit under the header. A Campus Pulse strip of LIVE tiles (for example library occupancy and today's placement talk) leads the feed, followed by a quick composer, "Share with your campus", and post cards.



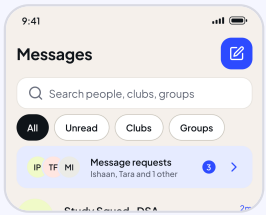
Explore

Campus name in the header, a search field with a filter button, category chips, trending hashtags with counts (#HackNight 428), Clubs for you with quick-join buttons, a This-week event list with RSVP buttons, and People to follow.



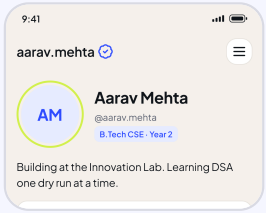
Create Post

A focused "New post" screen with no bottom bar: author, a focused text area with a live counter (105 / 280), photo upload (up to 4 images, 10 MB each), community chips, optional Event, Location and Audience rows, a reach preview and a fixed "Publish to campus" button.



Messages

Search, filter chips (All, Unread, Clubs, Groups), a Message requests row with stacked avatars and a count badge, and conversation rows with unread styling, time stamps, unread counts and online dots.



Profile

Verified username, a lime-ringed avatar, name, handle and course tag, a short bio, stats (posts, followers, following), Edit profile and share buttons, clubs and interests, campus badges and Posts / Events / Saved tabs.

Usability and accessibility

Consistent
The same layout and navigation on all five screens, built from the same components.

Large targets
Touch targets of 40 to 48 px for buttons, chips and navigation items.

High contrast
Strong text contrast on light surfaces and dark tiles. Color is paired with labels and icons.

Clear hierarchy
Type scale, spacing and card grouping show what matters first.

Instant feedback
Active tab pill, unread dots and badges, selected chips and the live character counter.

08 Screens of the User Interface

The final CampusLoop screens, as 390 × 844 px mobile frames. Each screen keeps one colour through the whole report.

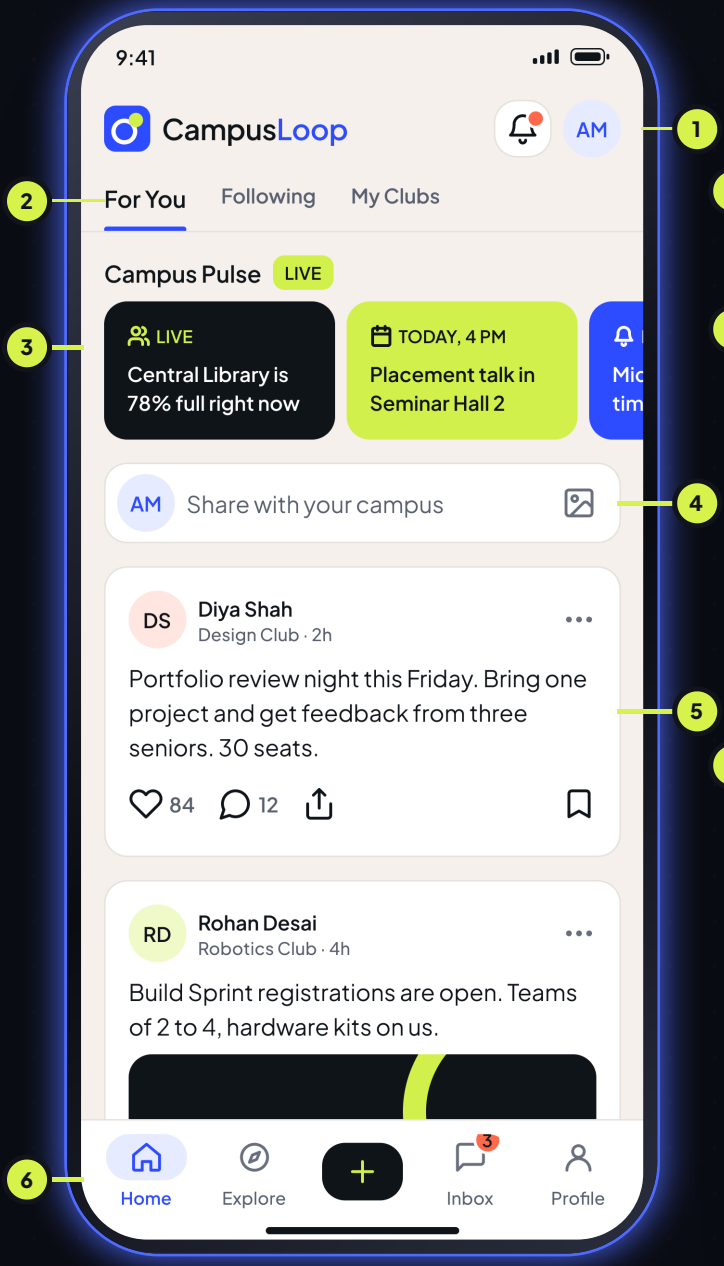


HOME + EXPLORE + CREATE POST + INBOX + PROFILE + HOME + EXPLORE + CREATE POS

- 8.1 Home
- 8.2 Explore
- 8.3 Create Post
- 8.4 Inbox
- 8.5 Profile
- 8.6 Design system

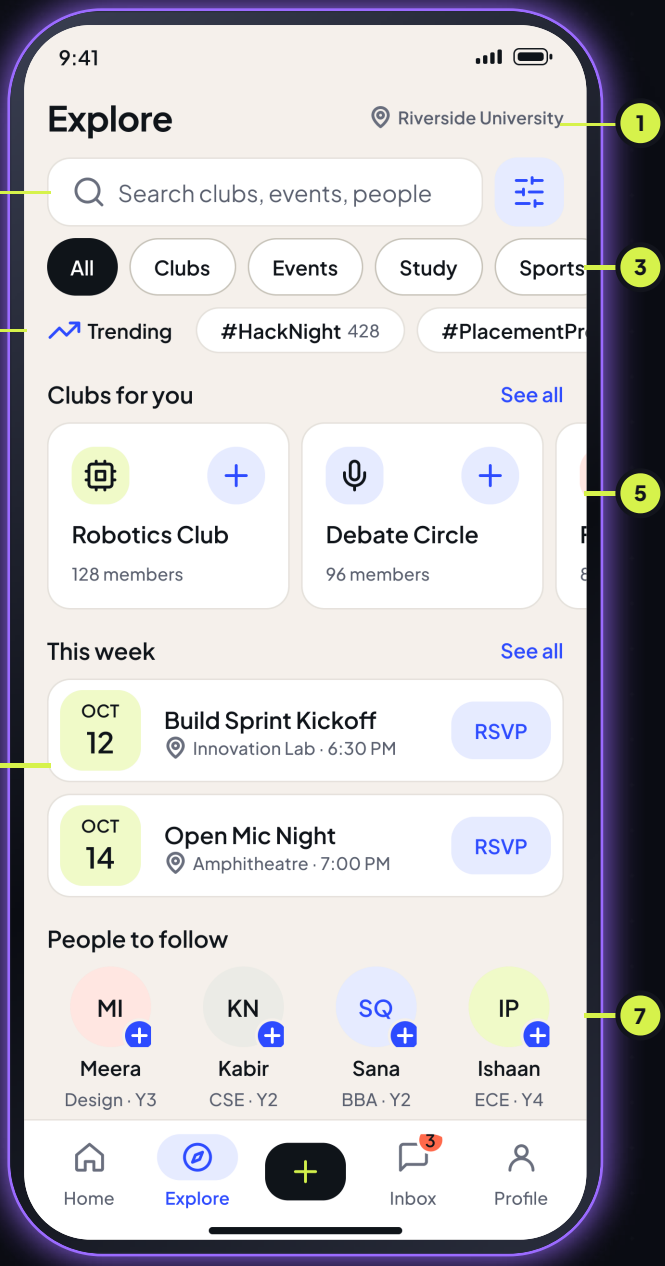
User interface screens

Figure 8.1: Home screen



1. Header: CampusLoop wordmark, notifications with an unread dot, and the profile avatar.
2. Feed tabs: For You, Following and My Clubs, with an active underline.
3. Campus Pulse: LIVE tiles for time-sensitive updates.
4. Quick composer: “Share with your campus”, with a photo button.
5. Post card: author, club and time, text, and the like, comment, share and save row.
6. Bottom navigation: Home, Explore, the ink “+” Create button, Inbox with an unread badge, Profile.

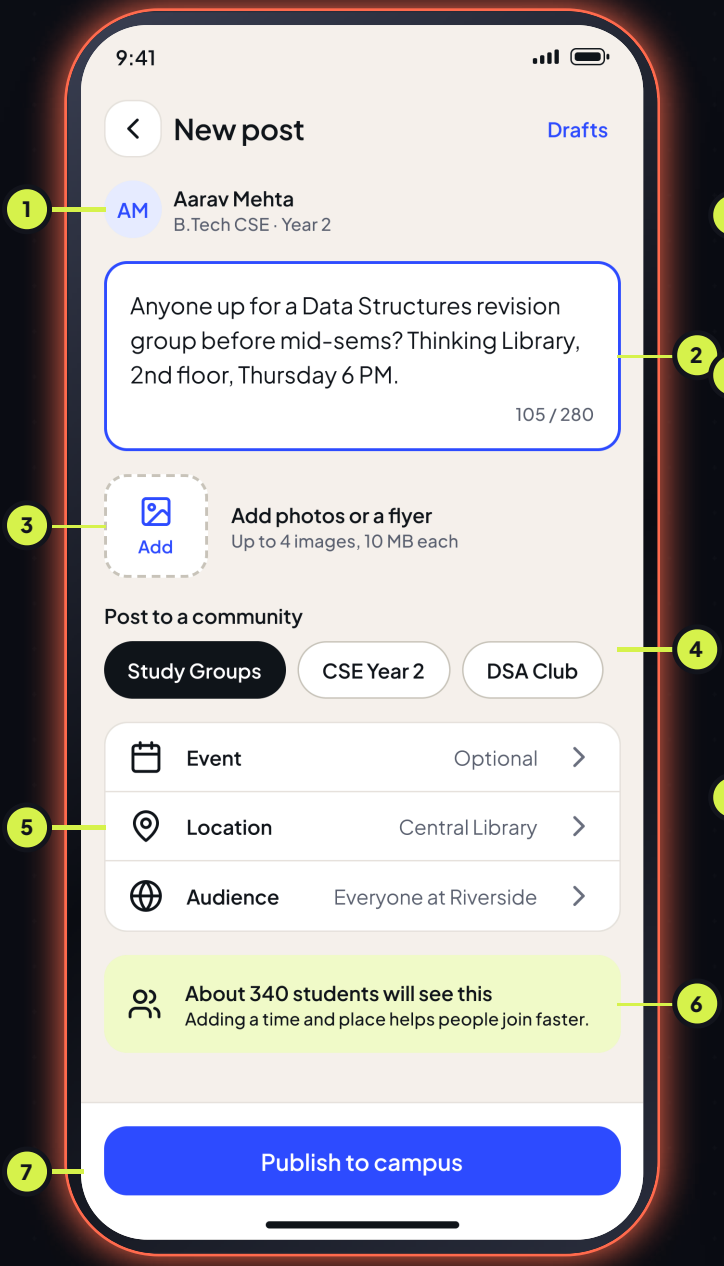
Figure 8.2: Explore screen



1. Title and campus name.
2. Search field with a filter button.
3. Category chips: All, Clubs, Events, Study, Sports and more.
4. Trending hashtags with post counts, such as #HackNight.
5. Clubs for you: cards with a quick-join “+” button.
6. This week: events with a date block and an RSVP button.
7. People to follow: name, course, year and a follow badge.

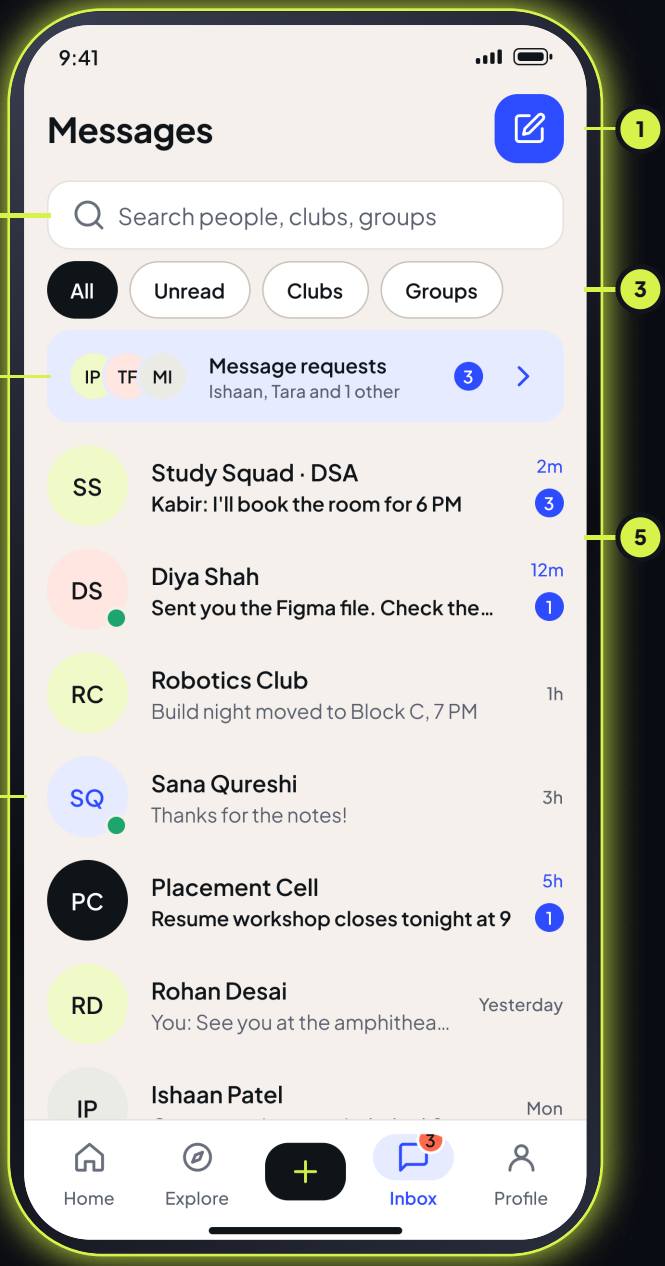
User interface screens

Figure 8.3: Create Post screen



1. Author: name, course and year.
2. Text area in its focused state, with a live counter (105 / 280).
3. Add photos or a flyer: up to 4 images, 10 MB each.
4. Post to a community: Study Groups, CSE Year 2, DSA Club.
5. Optional Event, Location and Audience rows.
6. Reach preview: “About 340 students will see this”, with a tip to add a time and place.
7. Fixed “Publish to campus” button.

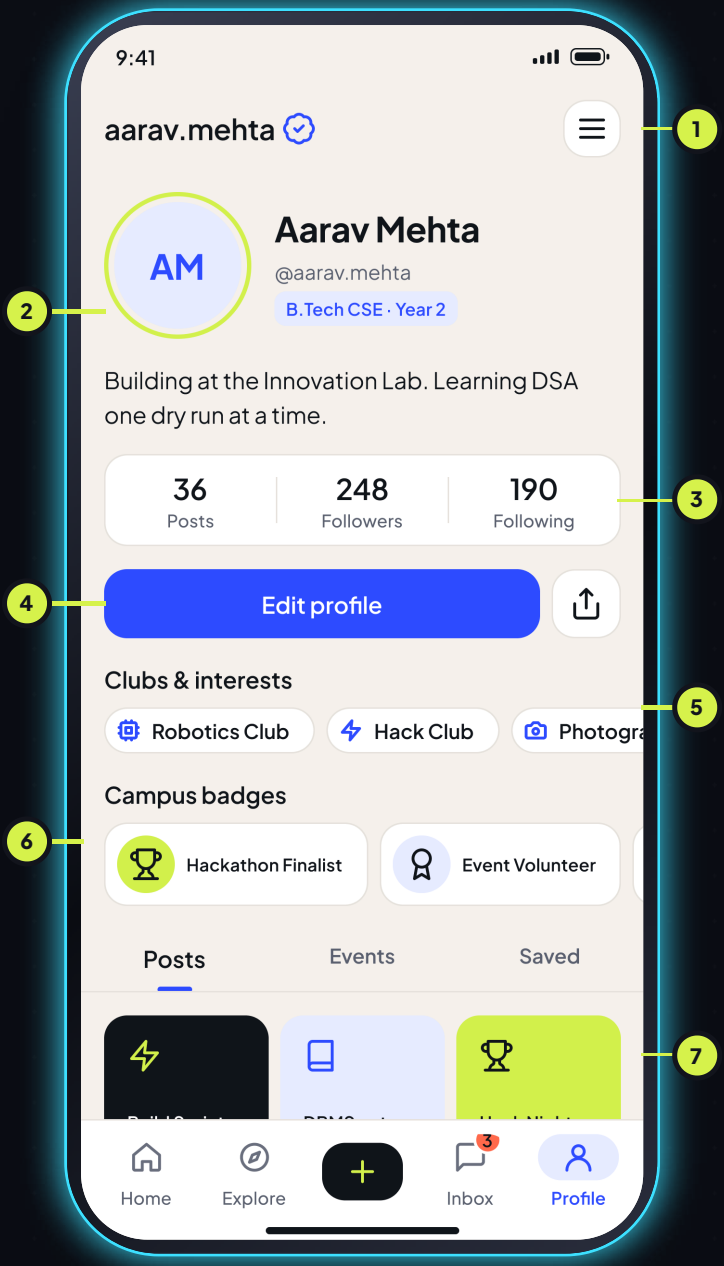
Figure 8.4: Inbox screen



1. Messages header with a compose button.
2. Search people, clubs and groups.
3. Filter chips: All, Unread, Clubs, Groups.
4. Message requests: stacked avatars and a count badge.
5. Unread conversations: bold preview, blue time and unread count.
6. Read conversations; a green dot shows who is online.

User interface screens

Figure 8.5: Profile screen



1. Header: verified username and menu.
2. Identity: lime-ringed avatar, name, handle, course tag and bio.
3. Stats: posts, followers, following.
4. Edit profile and share buttons.
5. Clubs & interests as chips with icons.
6. Campus badges: Hackathon Finalist, Event Volunteer and more.
7. Posts, Events and Saved tabs with post tiles.

What all five screens share

Status bar and home indicator
Every frame is 390 × 844 px.

Bottom navigation
Home, Explore, an ink "+" Create button, Inbox and Profile. Create Post replaces it with a fixed Publish button.

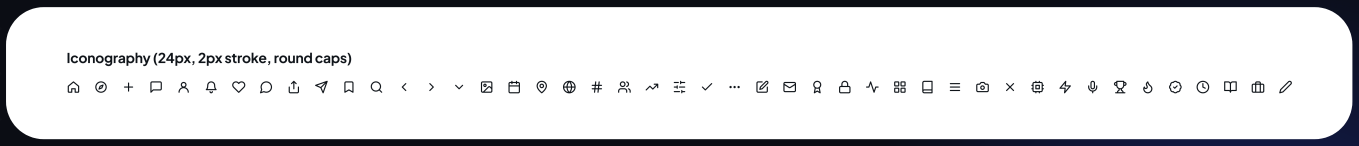
Same margins and cards
16 px side margins, white cards on a warm canvas, and rounded corners from one radius scale.

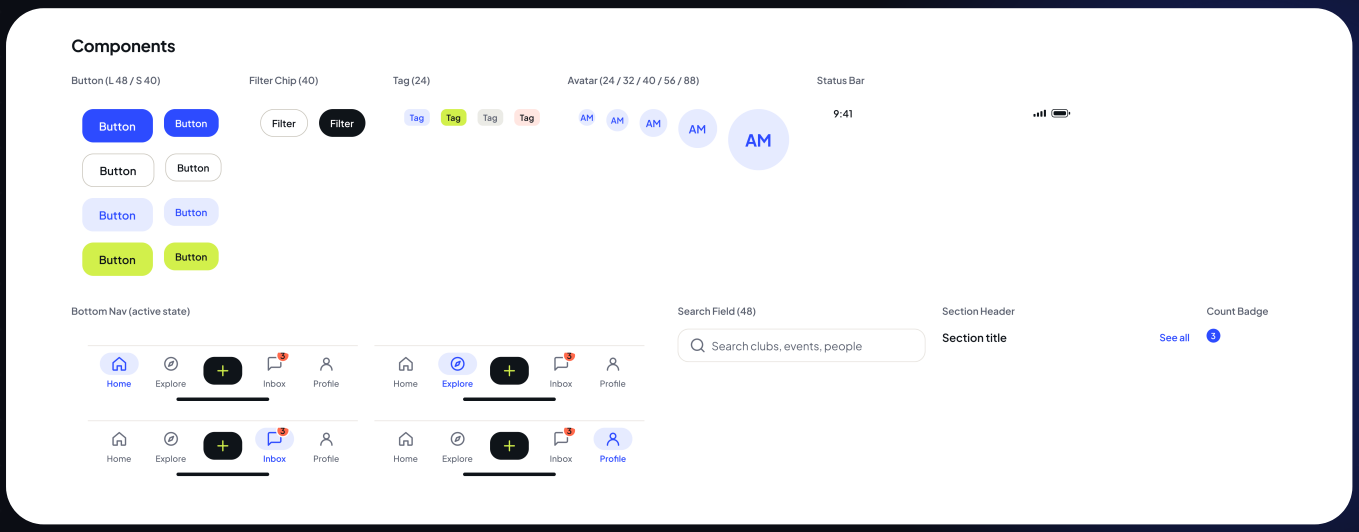
Same chips, tags and avatars
Initial avatars in soft tints, filter chips and tags from the component set.

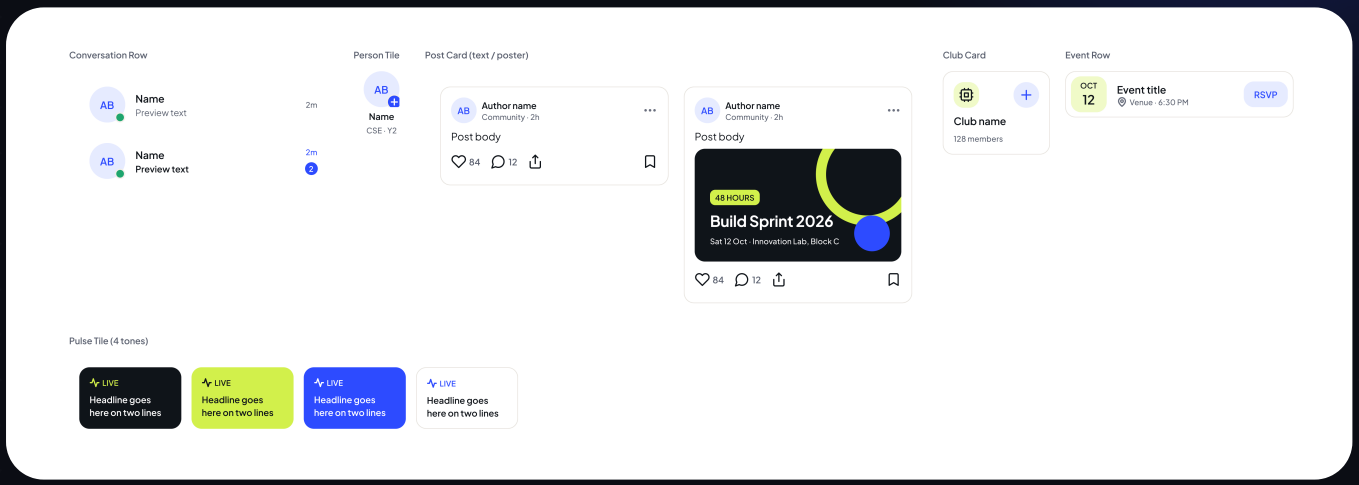
One typeface
Plus Jakarta Sans throughout, with blue for actions and lime for live highlights.

Figure 8.6: Design system

The component and icon sheet from the Figma file. Every screen above is assembled from these parts.







Fifteen reusable components

Button · Filter Chip · Tag · Avatar · Status Bar · Bottom Nav · Search Field · Section Header · Count Badge · Conversation Row · Person Tile · Post Card · Club Card · Event Row · Pulse Tile

09

Tools and Technologies Used

TOOLS + 09 + FIGMA + SVG

IA + PLUS JAKARTA SANS + VARIABLES + COMPONENTS + SVG DIAGRAMS + FIGMA +

Figma

Main design tool: frames, auto layout, components with variants, variables (color, spacing, radius), text styles and icons.

Aa

Plus Jakarta Sans

A single typeface for all text: Regular, Medium, SemiBold and Bold.

Figma Variables and Styles

Reusable design tokens for color, spacing, corner radius and typography.

Component library

Reusable components with variants that keep every screen consistent.

Diagrams and report layout

Vector (SVG) diagrams for the flowchart, use case diagram and DFDs, laid out with HTML and CSS and exported to PDF.

Design tokens to screens

Eight color tokens, one type scale, one spacing scale and one icon style flow into all five screens.

5	15	8	40+	1
screens	components	color tokens	icons	typeface

10

Conclusion

One loop. Five screens. One design system.

CampusLoop shows how a focused, consistent interface can bring the scattered parts of campus life into one mobile experience. The project covered the complete UI/UX workflow: identifying users and goals, planning the structure with a flowchart, use cases and data flow diagrams, building a reusable design system, and designing five connected screens that share the same components, colors and typography.

The design-system-first approach made the screens faster to build and kept them visually consistent, while the bottom navigation, Campus Pulse and quick composer keep the most important actions one tap away. Working through this case study improved my understanding of user-centered design, visual hierarchy, component-based design and design documentation.

Future scope

- Clickable prototype
- Usability testing with real students
- Notifications and event reminders
- Dark mode
- Accessibility audits
- A connected backend for the data stores in the DFD



NK YOU + CAMPUSLOOP + MAHER BHATT + 25C21007 + THANK YOU + CAMPUSLOOP +

Maher Bhatt
Enrollment No. 25C21007 · Semester 3

Open the Figma file