📋 Document Information

Fields	Value
Product Name	Campus Connect – AI-Driven Community & Study Coordination
Document Owner	Felci Joan Melvin Joseph
Stakeholders	• University Students (Primary Users) • University Administration (for SSO and event data) • Development Team (3–4 members) • Faculty Advisors / Mentors
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📊 Executive Summary

Problem: University students struggle to organize their academic and social lives because information is fragmented across multiple platforms, making it hard to form effective study groups and stay updated on campus events.

Solution: Campus Connect is a single and secure platform with **AI-powered study-partner matchmaking** to create compatible study groups, helping students collaborate efficiently.

Impact: Expected to increase student engagement and retention, with at least **50% of users forming study groups within the first month** and improved participation in campus events.

Investment: Requires a small development team (3–4 members), cloud-hosted backend, AI matchmaking module, and integration with University SSO. Estimated **timeline: 10 weeks** from design to MVP launch.

👥 Target Audience

User Persona

Name: Marteena.

Age / Year: 18, First-year undergraduate

Tech Habits:

- Frequently uses WhatsApp, Telegram, and Discord for communication
- Checks campus portals and emails regularly
- Uses Google Calendar and LMS apps to track classes and assignments

Motivations:

- Wants to excel academically and stay socially active
- Seeks efficient ways to find study partners and participate in campus events

Pain Points:

- Struggles to find compatible study group members
- Misses events due to scattered information across multiple platforms
- Feels socially isolated at times

Goals:

- Quickly find relevant study partners and form balanced study groups
- Stay updated on campus events and club activities
- Manage academic and social life from a single platform

💡 Solution Overview

MVP Definition

The **Minimum Viable Product (MVP)** for *Campus Connect* centers around the **AI-Driven Study Group Matchmaker**, which validates the platform's ability to connect students efficiently based on academic compatibility and preferences.

Core Functionality

The MVP aims to solve the problem of **fragmented communication** and random study group formation by providing a **single intelligent platform** where students can:

1. **Create a basic profile** with key academic information (courses, topics of interest, preferred study times, and learning style).
2. **Receive AI-generated matches** for study partners or groups based on similar goals, compatible availability, and complementary strengths.
3. **Send and accept invitations** to form groups within the app.

4. **View a simple campus event feed** that aggregates academic and club-related activities.
5. **Get notifications** for new matches, group invites, and upcoming events via email.

AI Matchmaker — Inputs & Outputs

- **Inputs:** Course, year of study, learning style, preferred study time, topics needing help.
- **Outputs:** Ranked list of compatible study partners or suggested groups.

Goal of MVP

To test whether AI-based matchmaking can **significantly reduce the time and effort** students spend finding effective study partners and thereby **increase engagement** in academic collaboration.

Minimal Feature Set

Category	MVP Features
User Setup	University SSO login, basic profile creation
AI Matchmaking	Matching algorithm using key academic preferences
Group Formation	Ability to view matches, send/accept invites
Communication	Basic in-app chat or group notification
Notifications	For any new matches, group invites, and upcoming events via email
Event Feed	Aggregated academic and club events

Future Scope (Excluded Features)

To maintain focus on validating the AI-based study group matchmaking, the following features are **excluded from the MVP** and may be considered for future releases:

- **Advanced analytics** such as group performance tracking or AI study recommendations.
- **Integration with external social platforms** (e.g., WhatsApp, Telegram).
- **Gamification elements** like badges, leaderboards, or point systems.
- **Video conferencing or live study sessions** within the app.
- **AI-driven event recommendations** beyond simple feed aggregation.

Value Proposition:
Campus Connect helps students manage both their academic and social lives in one place. It brings together all campus communication and uses AI to match students into well-balanced study groups. This feature helps students match with suitable study partners more easily, saving time, reducing stress, and fostering stronger campus connections.

🎨 User Stories & Acceptance Criteria

1. Study Group Matching

- **Objective:** Help students find compatible study partners quickly and efficiently.
- **User Story:**
  As a student, I want to find compatible study partners for my courses so that I can collaborate effectively.
- **Acceptance Criteria:**
  - Given the user has completed their profile, When they open the "Find Study Partners" tab, Then the AI suggests at least 3 compatible matches per course.
  - Given user preferences are entered, When AI generates matches, Then matches are based on overlapping schedules and shared topics.
- **Priority:** High
- **Effort Estimate:** 8–10 story points

2. Profile Setup

- **Objective:** Ensure the AI has sufficient information to generate accurate study group matches.
- **User Story:**
  As a student, I want to create and update my study profile so that the AI can recommend better matches.
- **Acceptance Criteria:**
  - Given a new user, When they access the profile setup, Then they can enter courses, preferred study times, topics, and learning style.
  - Given the user updates profile data, When they save changes, Then AI match suggestions update immediately.
- **Priority:** High
- **Effort Estimate:** 5–6 story points

3. Group Invitation

- **Objective:** Allow students to quickly form study groups with suggested peers.
- **User Story:**
  As a student, I want to send invitations to suggested students so that I can form a study group quickly.
- **Acceptance Criteria:**
  - Given AI match suggestions, When the user clicks "Invite," Then an invite is sent to the selected student.
  - Given an invitation is sent, When the recipient responds, Then the sender receives a notification of acceptance or rejection.
- **Priority:** High
- **Effort Estimate:** 5–7 story points

4. Event Discovery

- **Objective:** Keep students informed about upcoming campus events relevant to their interests.
- **User Story:**
  As a student, I want to see upcoming campus events so that I don't miss opportunities to participate.
- **Acceptance Criteria:**
  - Given the user is logged in, When they open the "Events" tab, Then at least the next 10 upcoming events are displayed.
  - Given events are displayed, When the user applies a filter, Then only events matching the category are shown.
- **Priority:** Medium
- **Effort Estimate:** 3–4 story points

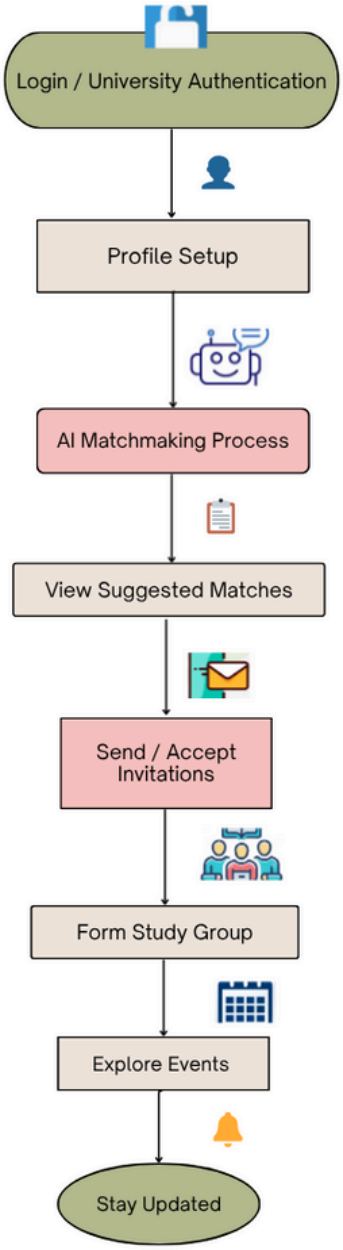
5. Notifications

- **Objective:** Ensure students receive timely updates about matches, invites, and events.
- **User Story:**
  As a student, I want to receive alerts about new matches, invites, or events so that I stay updated.
- **Acceptance Criteria:**
  - Given a new match or invite, When it occurs, Then a push notification or email is sent within 5 minutes.
  - Given notifications are sent, When the user opens settings, Then they can toggle notifications on/off.
- **Priority:** Medium
- **Effort Estimate:** 3–4 story points

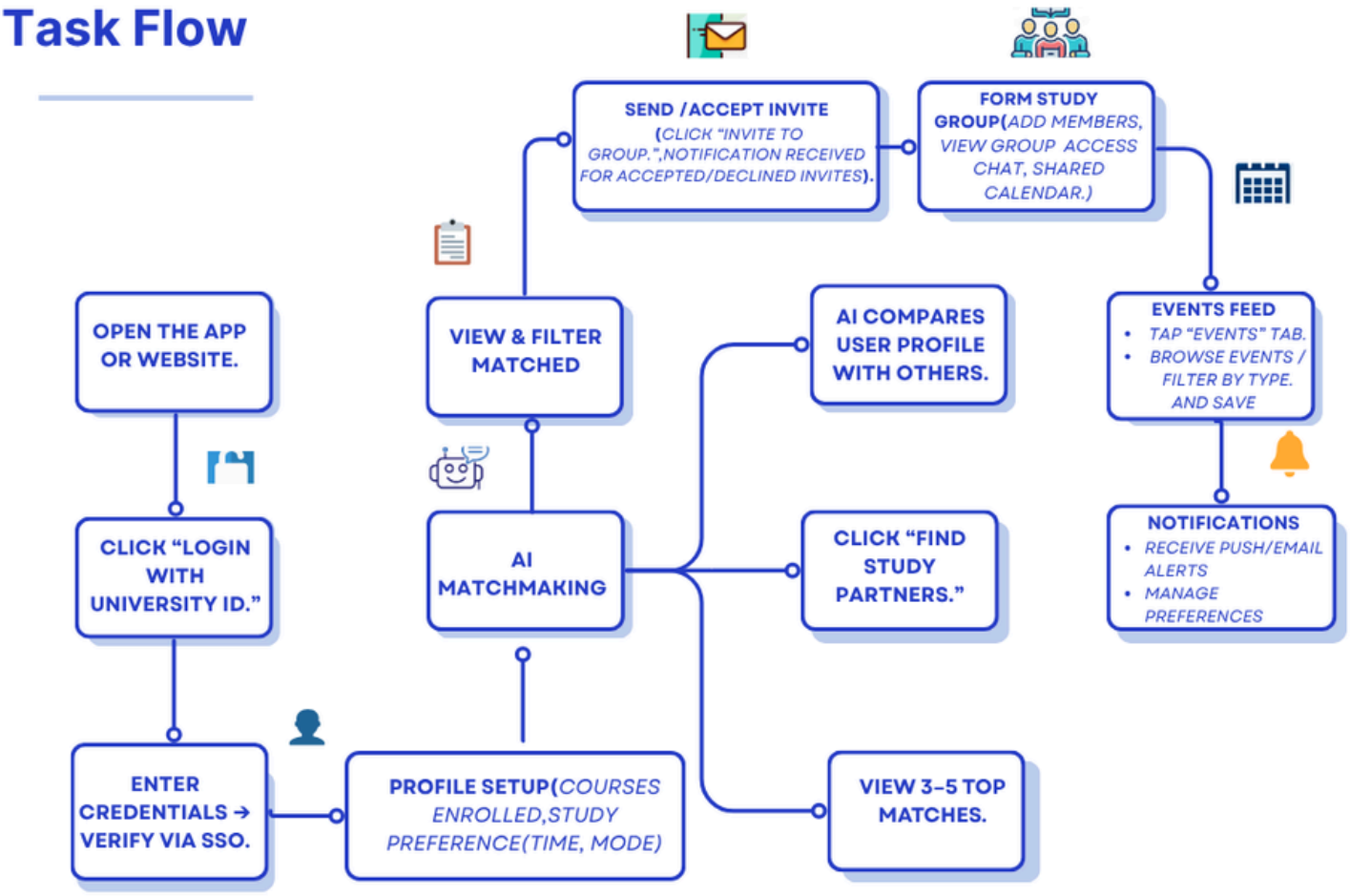
6. Secure Login

- **Objective:** Ensure only verified university students can access the platform.
- **User Story:**
  As a student, I want to log in securely using my university credentials so that only verified students can use the platform.
- **Acceptance Criteria:**
  - Given a student account exists, When the user enters valid SSO credentials, Then they are granted access.
  - Given invalid credentials, When the user tries to log in, Then an error message is displayed.
- **Priority:** High
- **Effort Estimate:** 4–5 story points

User Flow Diagram



Task Flow



🏗️ Technical Requirements

AI Component

- **Inputs:** Course, preferred study time, topics, learning style, student schedule
- **Outputs:** Generated list of suitable study group members
- **Algorithm:** Matchmaking based on similarity metrics, availability overlap, complementary skills

Third-Party APIs

- University SSO/Auth API
- Calendar integration (Google/Outlook) for schedule matching
- Notification API (Push/Email)

Other Technical Needs

- Mobile-friendly web app or native mobile app
- Secure backend database to store user profiles and preferences
- Lightweight AI model for matchmaking (can be cloud-hosted)
- All data communication will be encrypted (HTTPS) to ensure user privacy and security.

🎯Launch Success Metrics (KPIs)

Funnel Stage	Metrics (KPI)	Target	Reason
Acquisition	Number of users signing up for Matchmaker	500 new users per week	Shows how many people are discovering and joining the feature
Activation	% of users completing their first study group match	70% of new users	Ensures users experience the main value quickly
Retention	% of users returning within 7 days	50% of matched users	Shows if users find the matches useful and keep coming back
Referral	Users invited by existing users	20% of new users	Measures organic growth and how users spread the feature
Engagement	Avg. number of study groups formed by per user	2 group per user	Measures how actively users are participating in forming study groups