

Project Proposal – Campus Marketplace App

Project Name

Campus Marketplace

Project Description

The **Campus Marketplace App** is a web platform designed to provide students with a safe and convenient way to buy, sell, and exchange goods and services within their university community. Many students struggle with overpriced books, limited access to affordable supplies, and the lack of a centralized, trusted place to connect.

Our solution creates a **secure, student-only marketplace** where users can list items, browse products, and make transactions directly with peers. This project is valuable academically as it applies full-stack development, agile methodologies, and database integration in a real-world context. As a product, it has strong potential to enhance student life by reducing costs and promoting sustainability through reuse.

Tentative Technology List

- **Frontend:** React / Next.js, Tailwind CSS
- **Backend:** Node.js with Express
- **Database:** Supabase (PostgreSQL) or MongoDB Atlas (with Mongoose)
- **API Integrations:** REST/GraphQL APIs for listings, authentication, and payments
- **Testing:** Jest / React Testing Library / Postman for API testing
- **Deployment/Hosting:**
 - Frontend → Vercel or Netlify
 - Backend → Heroku
 - Database → Supabase (PostgreSQL) or MongoDB Atlas
- **Version Control:** GitHub (with GitHub Projects for task tracking)

Collaboration Plan & Tools

- **Meetings:** Weekly team sync (1x in person or via Zoom) + quick check-ins as needed

- **Communication:** Slack / Discord for real-time chat
- **Productivity & Task Management:** Trello / ClickUp for sprint planning, backlog, and user stories
- **Version Control:** GitHub for source code and project documentation

Sprint Schedule & User Stories

The project will follow **5 two-week sprints** under Agile methodology.

Sprint 1 – Setup & Planning

- User Story: As a developer, I want to set up the project environment, repo, and initial UI scaffold so the team can collaborate effectively.

Sprint 2 – User Authentication

- User Story: As a student, I want to log in using my campus email so that only verified users can access the marketplace.

Sprint 3 – Listings & Search

- User Story: As a user, I want to create, edit, and delete listings so I can sell items.
- User Story: As a user, I want to search and filter listings so I can quickly find items I need.

Sprint 4 – Transactions & Chat

- User Story: As a buyer, I want to message sellers and agree on a price so I can purchase securely.
- User Story: As a user, I want to see transaction history so I can track what I bought/sold.

Sprint 5 – Testing, Deployment & Final Touches

- User Story: As a developer, I want to test and deploy the application so that users can access it reliably.
- User Story: As a student, I want a smooth, mobile-friendly UI so I can use the app easily on my phone.