Project Proposal: CCNY-LinkedIn Platform

Team Members: Oluwanifesimi Kukoyi , Mansij Mishra , Michael Romashov

Project Title: CCNY Connect: A Networking Platform for Students

Overview:

The goal of this project is to develop a web platform that acts as a networking hub for CCNY students. This platform allows students to connect with peers who have taken similar classes, find tutors willing to help and share academic resources. The platform aims to foster collaboration and build a supportive academic community.

Objectives:

- Create a user-friendly interface for seamless navigation and interaction.
- Enable students to search for and connect with peers based on shared classes and academic interests.
- Provide a directory of tutors and mentors, including their subjects of expertise.
- Allow users to share notes, study guides, and other resources.

Key Features:

- **User Profiles:** Display information such as name, major, classes taken, and tutoring availability.
- **Class-Based Search:** Find peers who have taken specific classes or are currently enrolled.
- **Messaging System:** Communicate directly with other users.
- **Resource Sharing:** Upload and download study materials and notes.
- **Dashboard:** Personalized dashboard with recommended connections and resources.

Technology Stack:

- **Frontend:** The front end will be built with the Next framework, using strict-mode TypeScript to ensure type safety. Components will be created and styled manually with the help of Tailwind CSS.
- **Backend:** The back end will leverage Next's powerful API routing functionality to implement routes and server-side actions for specific pages or form actions.
- **Database:** Data will be stored in a simple MySQL database.
- **Authentication:** Ideally authentication would be handled directly through CCNY's SSO, but access is unlikely to be granted to this application. Instead, users will be required to register with and verify ownership of an *@citymail.cuny.edu* address.
- **Other:**
    - To run everything together and to standardize the runtime environment, Docker will be used together with Docker Compose.

    - Hosting will be done through a DigitalOcean droplet configured with basic CI/CD to streamline deployments.

Timeline:

- **Week 1-2:** Research and design the platform layout and user flow.
- **Week 3-4:** Develop the frontend components.
- **Week 5-6:** Build the backend API and integrate with the database.
- **Week 7-8:** Implement authentication and security features.
- **Week 9-10:** Test the platform, fix bugs, and refine the user experience.
- **Week 11-12:** Finalize documentation and prepare for presentation.

Expected Outcomes:

- A fully functional web platform that facilitates networking, tutoring, and resource sharing among CCNY students.
- A user-friendly interface that enhances academic collaboration and support.
- A secure system that ensures the privacy and safety of all users.

Conclusion:

The CCNY Connect platform will serve as a valuable tool for students, promoting collaboration, academic growth, and community building. By connecting students with shared academic experiences, the platform aims to create a supportive environment that enhances both learning and networking opportunities.