CS 30700 Software Engineering I

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Team 16

CampusLink

Project Charter

- **Project Statement**

The CampusLink project aims to develop a robust, comprehensive application tailored for university environments that will empower student users to foster connections with classmates, get involved in campus life, and facilitate efficient academic collaboration. This application will serve as a centralized, safe, free-willed, and inclusive hub for students to connect with selected peers based on their profile and courses, and match their schedules to find optimal times for both academic collaboration and social interaction.

- **Project Objectives**

The core objective of the project is to create an innovative forum-like software application that implements course data to connect users and facilitate interaction and collaboration, achieving this via creating group chats in external platforms like GroupMe, WhatsApp, or SMS, and displaying an environment to view your circle's availability and involvement in virtual group spaces similar to those seen in the app Life360. CampusLink will distinguish itself from other classic and formal academic forum platforms like Piazza and Ed by fostering a sense of community, implementing social features, offering privacy options for sharing specifics, and enhancing voluntary academic interactions. Another core objective is to support a secure system of communication by validating university emails. This means that only

Purdue students will be able to access and use CampusLink. Each user on the app will also be able to create and customize their unique profile, and users with similar interests, areas of study, or perhaps even proximity will be recommended to each other. A main feature of our application will be to allow created groups to share their schedule details with each other, match availabilities, and view available vs. busy time slots in an overlapping manner for all the people in the circle. Users will also be able to find out the optimal path from their location to their classes' location.

- **Stakeholders**

- **Users**: Students at University Campuses. Initially only adapted for Purdue University, may be later expanded to more universities. University Staff and Adminitrators may also use or endorse the use of the application among students under their guidance.
- **Developers**: Billy Chen, Catherine Mao, Michael Law, Phillip Bernwanger, Victor Fenton Aguilar.
- **Project Coordinator**: Yu Shi.
- **Project Owners**: Billy Chen, Catherine Mao, Michael Law, Phillip Bernwanger, Victor Fenton Aguilar.

- **Project Deliverables**

- **Social media / forum style Web App**: modern social media-styled app for all students.
- **Collaborative Callendar:** All users that are a part of created groups of circles within the application will have access to a Collaborative Calendar feature which, up to each user's disclosure, will display an overlapping but clear calendar with everyone's available time

blocks, class times, and shared activities. This will facilitate finding appropriate times to meet socially or to perform academic tasks. If possible, users will also be able to import their personal calendars from external sources to easily fill their in-app schedules.

- **Enter or Create Group Chats based on your course data**: By using GroupMe or WhatsApp's API, we can form centralized group chats to connect students in matching areas of study, courses, social circles, or interests.
- **Messaging system:** Users will be able to send messages to the participants in the same group.
- **Self entered classes**: Using scraping methods to automatically enter classes into our SQL database of courses.
- **Purdue buildings map**: By using Google Map's API, we can show the optimal path from the student's location to their classes' location. We will pair building abbreviations included in the students' schedules to the full names of the buildings discoverable in Google Maps, then using the API we will show a route and tell the student which floor within the building the classroom is in.
- **Interest-Based Networking**: Create a recommendation system that suggests students with similar interests, majors, or extracurricular activities, promoting connections beyond the classroom. User profile data is stored in a SQL database.
- **Languages**:
    - Front-end: HTML, CSS, Javascript, React
    - Back-end: Python (Django framework)
    - Server: Linux
    - DataBase: MySQL