STATEMENT OF WORK

(Peer Connections)

Issued to Professor Narayanasami CS 3354.002 Software Engineering Spring 2024

Issued By

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Introduction

The idea for this project is that we take group studying to the next level keeping it easy and simple for users. It can be challenging to find motivation to study and a lot of the time it is easier when you are around people in the same boat as you. To achieve this motivation, our app Peer Connections is suitable. Our app will help students find study groups based on their courses and schedule. The app includes group communication, file sharing, and scheduling a study session.

Background Information

Peer Connections will be an app that brings students together. Students who may feel a sense of loneliness will be able to connect with other students to study or just relate to one another. This can also lead to great friendships. Peer Connections is an app that will list courses/schedules and match students to each other based on that. They will be able to find people who match their courses, make group chats, and share files to assist in studying. Scheduling study sessions will be the key aspect of the app as in person meetings will help alleviate the sense of isolation.

Current Environment

The main goal of this app is to allow students to find people effectively and efficiently with similar college situations to one another, fostering a sense of community and collaboration. By offering an app where individuals can effortlessly connect with peers facing similar academic problems. We hope to make forming study groups much easier and less frustrating, enabling them to focus on their coursework in a supportive learning community.

On the other hand, we hope to help students by creating an inclusive workspace making it easier for students to navigate through the stressful college years. The app strives to offer comprehensive solutions, addressing challenges encountered by students throughout their academic endeavors. Whether students need assistance with complex course materials, preparing for exams, or even collaborating on projects. We aim to provide a solution to their problems and help them throughout their educational journey.

Goals and Objectives

Business and Solution Objectives: Our main mission/goal with this project is to bring students/individuals together. Another objective is for all users of the app to be satisfied. This app is meant to be used often, with the first use being finding study groups, then moving to daily use with the communication between those in groups of two or more people. We would also like to expand more to an outside of school aspect to encompass other interests, like being into anime or liking movies which would go into updates. This will be so that students can meet on more casual interests.

Technical Objectives: Be able to suggest courses (schedules) for students to choose what applies to them. Be able to suggest peers/people based on what the student chooses as their courses. Implement the ability for group chats of small to large groups to be created for communication.

Security and Service Objectives: Provide proper user authentication with email and password. The app will be verified with the school, so that the student will authenticate with their school email. To create an app that is easy and simple to use. Provide an area to communicate for help with any confusion or issues with the app.

Scope of Work

The focus of this project involves establishing a fundamental CRUD (Create, Read, Update, Delete) API on the backend. Subsequently, we aim to connect the front end with their API to enable users to conveniently access and visualize their data through an intuitive and responsive interface. While the project's scope may expand in the future, our initial objective is to achieve this foundational functionality. Additionally, implementing basic authentication is essential to ensure security during the creation and modification of events.

<u>Deliverables</u>

Develop a fully functioning app that enables students to find study groups based on their subject. In this app, the user should be able to select a specific subject, choose a preferred meeting time, and even set up a virtual meeting. The app will provide user authentication, user profile, searching and matching, notifications, group chat and communication, security, privacy, etc.

Milestones

Milestone	Estimated Delivery Date
List of all requirements, functional and non-functional	February 16
UML diagrams and concrete test cases/scenarios	March 8
Wireframes for the site, and working authentication/group creation	March 29
Implement CRUD API into the app	April 19
Fully Finished product	April 28

Period of Performance

The start of this project will begin on February 2^{nd} and will end on April 28^{th} . The project will be presented on either April 29^{th} or May 1^{st} .

Place of Performance

This project will be completed on remote terms through Microsoft Teams and Discord.

Front-end/Back-end Functionalities

Front-end:

With the implementation of CRUD API, the user will have access to their account to allow them to update any information and status, search bar for the user to locate study groups, a chat section to communicate with groups or friends. In addition, a create/form group bar for the user to create their own study group if one was not previously active.

Done by: Habeel, Zainab, and Dagmawet

Back-end:

CRUD API for databases will be used to create, update, maintain, and delete study groups. There will be an automated system to keep track of the study groups created to combat against duplicated sessions names. User authentication and 2-step verification will be implemented to minimize security issues and maximize privacy. These are the early drafts of the application; more specific updates will be provided as we progress with the project.

Done by: Akhil, Zainab, and Dagmawet

Specific Requirements

When catering to students more information will be required for security reasons. Students will need to provide their school email and wait for the app to verify it with the school. In addition, specific sessions will only be available for students and not for the rest of the users.

Resource Requirements

A computer, internet access, CRUD API, and IDEs to create a viable product.

Vendor Responsibilities

For security, the vendor must verify with the school for students and handle mass amounts of logins as well as 2-factor authentications and deny illegal entries. The vendor must show the different public groups open, the number of people in them, and basic description (if any is provided by the group host) to the user.

Client Responsibilities

The biggest client responsibility is providing accurate information when registering. The client should also join, form groups, and use the platform to connect with others.

Project Risks

One of the largest risks associated with this project is that if more and more courses are added, the app may get slower, which an app like this does not want.

Assumptions

We assume we will be able to process hundreds or thousands of requests and link students with classmates enrolled in comparable courses without experiencing any appreciable lag or delay.

Completion Criteria

Peer Connections will be considered successful when the app is live, allowing users to find study groups for their courses, group communication, file sharing, and scheduling a study session. Peer connections should provide a basic usable experience for users to conveniently access and find study groups.

Change Control Procedure

The group will vote unanimously to determine if a proposed modification to the Statement of Work is good and useful. Ultimately, the SOW will be changed if the vote is successful.

Points of Contact

The main form of contact will be through Teams:

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Acceptance

Printed Name and Title

Date:1/31/2024

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