1. **Introduction**

The goal is to create a student-oriented platform where students can connect with faculty, tutors, or other students through groups to ensure they can gain the help they need if they are struggling in class, want to further their knowledge, or make connections.

The scope applies to the functionality of the Faculty/Advisor app would include allowing students to get in touch with professors, tutors, or other students, allowing students to get in touch with other students to create study groups, allowing students to find scholarship opportunities and apply for them, focusing on readability and accessibility and allowing users to review tutors or professors.

The main regulatory concern entails difficulty creating a framework to connect the student aspects of the application with both the school/faculty side and company side. Other regulatory concerns about the project include creating and maintaining large amounts of study groups and scholarship opportunities with no performance or accessibility issues. Other minor concerns about the process of creating this project include time constraints, possible disagreements on layout or design, and writing ample valuable unit tests that ensure our scope is met while passing them throughout programming.

1. **Program Requirements**

As stated in our introduction above, we want to create a platform that allows students to connect with faculty, tutors, or others through groups. This will be achieved through the form of a web application.

For us to achieve our goal stated above, the work will need to be split into three parts, front end, back end, and testing. For the front end, we have Mahmoud and Patrick assigned, Aseem and Bryce will be our back-end team and Troy will be creating our test.

A list of tasks and goals will be created where members must complete several tasks each month. The goal is to have our first month handle the high-priority goals, these would be tasks that we need to handle for our website to function such as linking our back end with our front end. The second month will then consist of medium-priority goals such as developing our second-hand functions that build off of our main priority goals. The third month will consist of low-priority goals such as adding new features.

With these goals in place, achieving the main goal of creating a student-oriented platform where students can connect with faculty, tutors, and other students through groups becomes feasible. We can achieve this main goal by creating a system in which a user can create/login into an account in which they will be presented with a homepage where they can choose from a variety of options. The homepage will include options such as creating or joining study groups, making appointments with faculty/tutors and browsing scholarship opportunities.

Creating and joining study groups will be an option available to all students. If a student chooses to create a study group, they will be assigned that group’s leader. As the leader, they can then set the group to be private (not visible to all students and an invite is required to join) or public (all students may find and join the group) and be given the ability to send out invites. Each group will have an assigned topic based on the class the group leader created the class for. Students in this group will also have the ability to upload documents, comment/discussion sections on work, and view the members in the group. A student will also be able to browse public study groups and join them.

Students also have the ability to connect with faculty and tutors. Here the student will be able to look at the calendar of current faculty members and tutors. If there is an open timeframe the student may request an appointment at that time. A message box will be provided if students would like to specify exactly where they need assistance.

Each student will also be able to browse currently available scholarships. Here the student will be presented the name of the scholarship, the phone number and email for the company behind the scholarship, and a description of the scholarship. The student will then be presented with a link in which they can click to go to the scholarship website where they can find more information and apply for the scholarship.

1. **Data Requirements**

The project will include users who have a name, email, phone, role, office location (if the user is a professor or tutor), available hours (if the user is a professor or tutor), as well as a list of classes they have enrolled in/taught/tutored. There will be lists of all users in each respective role to allow others to search for users more efficiently

A list of scholarships will also be available where each scholarship will include the name, phone, and email of the individual who offers it. A description of the scholarship will also be provided, with an area to apply as a link. If time allows, this will be expanded as a separate area where a student can upload a resume and type text responses to questions the professor may ask. A list of applicants and their information will be visible only to the professor who offered the scholarship.

The final large area of data involves the study groups which have a group creator/leader and a list of members. A variable to allow the group creator to make the group public or private will be included along with the class the group was created for. Document categories may also be created by the group creator to distinguish between a study guide, notes on different units, etc. Members of the group can upload documents and post comments in the form of text submissions. A list of pending invites will be necessary for the group creator to see.

1. **Conclusion**

With these basic ideas and goals set in place, we can look at more out-of-scope items that could be implemented in the future. The first one is a more in-depth scholarship tab. As of right now, a student is able to browse scholarships and click an external link that takes them to the scholarship website where they can learn more information about it. In the future, we hope to add the feature where we are able to pull more information from the scholarship website and allow the student to upload the resume and apply to the scholarship directly on our website. This will create a simpler and more efficient interface for the students applying for scholarships. Another out-of-scope feature that would be possible to implement if time allows involves the study groups. This additional feature would be a voice channel in which the students of the group could meet and talk over whatever subject the study group is for. This voice channel could also be implemented when wanting to communicate with faculty and tutors. If time allows, the addition of these features would create a more extensive experience where all of the users’ education needs are present within one app instead of several.