*Group number: 40*
*Project title: HandRaise*
*Client: Md Maruf Ahmed*
*Advisor: Md Maruf Ahmed*
*Team Members: Brian Sayre, Jeremy Tracz, Nick Oswald, Michael Kies, Vance Kaw, Daniel King, Robert Walling*

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o **Project Summary:** *(Short summary about the project.  What are the design goals? Have the direction or scope of the project changed? This should be about a paragraph in length.)*

      In this project, the students will design an interactive learning platform (i.e., web-based application) that will allow students to participate in any class activity (e.g., quiz, poll, etc.) or post questions anytime (e.g., during the lecture or outside of lecture time) and the instructor will be able to provide feedback. The instructor will use this interactive platform to post any question for an immediate answer, post a quiz or open a discussion for the knowledge test. This learning platform will also provide student participation statistics that can be used for grading purposes. Our scope has largely stayed the same during the first semester and we plan on completing the main features of this project this semester.

o **Accomplishments** *(Please describe/summarize as to what was done, by whom, when and, collectively as a group since the last report. This should be about a paragraph or two in length. Bulleted points are acceptable as well. Please keep only your technical details related to your project. Figures, schematics, flow diagrams, pseudocode, and project-related results are acceptable, but please ensure that they are legible (clear enough to read) and to provide an explanation. If researching a topic, please add a few details about what was learned and how it is relevant to the project. If two or more people worked on a single task, be sure to distinguish how each member contributed to the task. Specific details relating to the assistance provided to other members may be included here.)*

**FrontEnd**

      The front-end team (Nick Oswald, Robert Walling, Jeremy T, and Daniel K) has learned Flutter, a front-end framework, and has started creating the pages the application will need. Recently the frontend team has been focused on creating and improving pages for three specific types of users, including professors, TAs, and students. As for what has been done by whom, Nick and Robert have been working on building new pages and app features while improving code efficiency by removing duplicate code, as well as working on UI improvements. Jeremy has been working on app pages as well, specifically a secure login and registration for students, TAs, and professors, as well as additional features. Daniel has been working on researching app testing, building some practice tests, and experimenting with future app developments. Moving forward, we are looking to continue developing the app while testing for potential problems while maintaining an easy to use interface.

**Backend**

The back-end team (Brian Sayre, Michael Kies, and Vance Kaw) has started work on a Spring Boot application using MySQL server to store the data for our project. We have completed a majority of the back-end application and have set up server space through Iowa State to get the API hosted on a server. The back-end team will now work on testing, documentation, refining the data being stored, and working on the live polling feature for the application. Since last report, almost all of the websocket backend objects have been created and implementation has started. Also, the team has finished hosting the documentation of the API on our teams' server.

o **<u>Pending issues</u>** *(If applicable: Were there any unexpected complications? Please elaborate.)*

A pending issue for the back-end team is the ability to effectively test our application. Our team does not have a ton of experience testing both the functionality of a Spring Boot application and load testing applications. Another pending issue has to do with web sockets, where the client/test socket is not connecting to the socket on the server-side. Hopefully, this past couple of weeks (introducing some of the backend objects) will make debugging this issue easier and faster so that it can be resolved
For the frontend, there are a few minor bugs that we are sorting out that are related to flutter. Along with that, we are deciding the best way to handle the user information and data once the user has successfully logged in.

**M** **Ahamed, Md Maruf [E CPE]**
to me ▾

\_\_\_MA\_\_\_\_ The team's progress could use some minor improvements which I will discuss with them.

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