Work Package

In the Spring semester, we have many tasks to complete to have our product in production. Major items I need to get done are outlined below:

- Design a way to identify who is a student or admin when logging in.
    - We would need to use Firebase to identify if a student or admin is logging in. This task would be fulfilled by the backend team. Knowledge of Firebase and API would be important to carry out this task. This task may take between 3-5 weeks to understand the important components of Firebase and API. Testing would need to be done to make sure the verification is done correctly. Testing itself may take 1-3 weeks.
        - The API would need to be secured using authentication and separate admin endpoints to require an authenticated user to be the "admin."
        - The admin elevation mechanism must be protected as well. If it is not protected, student users will have the option to become admins. It is crucial that this step is done carefully, and if more research regarding this is needed, it will be done.
        - Once the admin API is secured the app must be changed so it does not show student users the "admin" functions. The reason for this would be because the API calls would fail for student users.
- Authenticate a login
    - We would use NodeJS and MySQL. The task would be fulfilled by the backend team. Knowledge of how NodeJS and MySQl would be vital to completing this

task. This task may take between 3-5 weeks depending on the complexity when completing the task. Once the task is complete, testing will happen and may take up to 2 weeks to make sure the login was properly authenticated

- A new database would have to be created on mySQL. A user Table would be created.
- The NodeJS App will need to be connected to the mySQL database
  - I will need to research more on how the NodeJS app can be connected to the mySQL datase, and if that is something that can be done with basic skills set.
  - PostMan is something that would be used for API testing. It can be used to add new users to the mySQL database. I would need to research Postman and see how to use it alongside mySQL database.
  - After registration system is set up, a login system would be set up to authenticate users who login with a correct username and password.
  - It is important that anyone who is not associated with Tabor in any way does not get access to Tabor specific information.
- Next semester, there will be a big learning curve for the backend team.
  - One of my goals next semester is to learn as much as I can regarding API testing, and the important components of the backend. With research, I can help the team fulfill its commitment to Dr. Rangel.
  - I would like to help the team in the testing and compiling of the product so we can deliver a working product to Dr. Rangel at Tabor College.