**Progress Report**

*Team MJ3*

**Team member:**

Joonpyo Jun (NetID: joonpyo3, only team member)

**Completed Tasks:**

* Initialized the React application and named it *course-project*, which might be changed later to meet the concept of this project. This initial React application is compatible in both Web and Mobile environments. The development will be placed mostly under course-project/src directory and any necessary Node.js packages will be installed via command line with *npm* that updates *package.json* file automatically.
* Researched several University rankings dataset and popular fields of study in higher education institutions. *cwurData.csv* and *timesData.csv* will be used as main data files to list universities as they provide decent fields to rank institutions with, such as publications, citations, and quality of education, all in numerical values.
* Researched popular fields of study in higher education institutions dataset (*all-ages.csv).* Because this CSV file shows how many students are enrolled and employed after the graduation, it can be used to figure out which majors are popular in universities overall.

**Challenges:**

* It was difficult to find a dataset that I wanted to use for this project: the one where universities are ranked for each major, e.g., Harvard University in 1st place for Law major but 5th place in Pharmaceutics major.
* Using Python in this project might turn the development more complex as it is not as compatible as JavaScript with React framework. So, as I planned in the proposal, the JavaScript will be mainly used in the development.

**Remaining Tasks:**

* Front-end and Back-end development:
  + Basic UI – A page where the user can select a major then the university rankings are displayed for the selected major.
  + User Authentication – Using the Firebase Auth may be the best option to provide an easy yet strong authentication option. This is optional.
  + Data retrieval and functionality implementations – Need to retrieve specific data from each dataset as there are multiple datasets, then it is necessary to combine them to facilitate the functionality implementations.
* Keep looking for the ways to provide more appealing and user-friendly interface. I believe that the user should be comfortable with the application rather than being overwhelmed by it.