## **User Instructions**

## **Interaction Introduction**

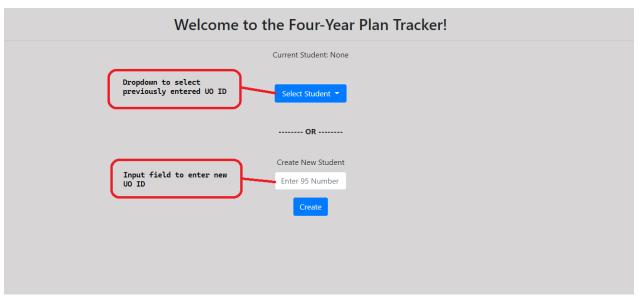
After completing the steps listed in the Installation\_Instructions.pdf file, the Four-Year Plan Tracker system should now be up and running.

Now, student and advisor users can utilize the system to create, modify, or view four-year course plans.

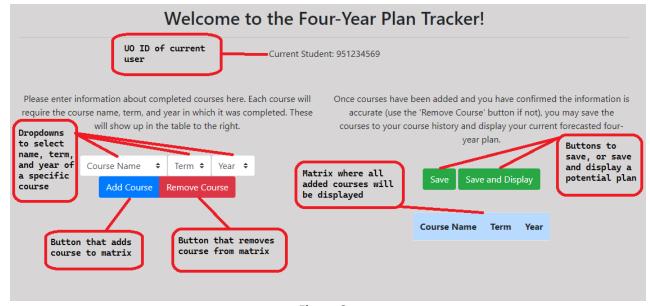
## Usage Walkthrough

- 1. After navigating to <a href="https://localhost:5000/">https://localhost:5000/</a>, the user is greeted with the system landing page (seen in Figure 1). Here, the user can select a UO ID from a dropdown menu or, if the student's UO ID has not yet used the system, enter a new UO ID. After selecting or entering a UO ID, the user is brought to the course modification page (seen in Figure 2) where they can create, modify, save, and view course plans.
- 2. The course modification page presents the user with several different options. Here, the user can add or remove previously taken courses based on the course name, and the term and year in which the course was taken during. If any fields are left blank, then an error message is displayed.
  - a. After selecting a course name, term, and year, and then selecting the blue "Add Course" button, the course is added to the temporary course matrix (located on the right-hand side, or bottom of the course modification page depending on the window size).
  - b. The user can also remove a course based on the information they input. After selecting the course name, term, and year, and then selecting the red "Remove Course" button, the course with the corresponding information is removed from the temporary course matrix.
- 3. Once the user has inputted the desired courses, they can either save, or save and display the new course plan.
  - a. By selecting the "Save" button, the current course plan is saved locally (to the user's machine) via the system's pickling functionality. For more information on how course plans are saved, view the SRS.pdf file.

- b. By selecting the "Save and Display" button, the current course plan is saved locally and displayed for viewing (seen in Figure 3). The final course plan is displayed in the form of matrices (one matrix per year in school, which will vary depending on courses input by the user). This page is discussed in more detail in the following step.
- 4. Upon selecting the "Save and Display" button, the current course forecast is saved to the user's local machine and a course forecast matrix consisting of each year the student plans on being in school (this ultimately defaults to four matrices—one for each of the four years) is displayed (seen in Figure 3). Each of those four matrices is further split up into four terms, and each term will hold up to four courses.
  - a. By this point, the matrices in this updated page hold any courses that a user defined to have taken previously as well as all the remaining courses calculated by the Four-Year Plan Tracker forecasting algorithm. For more information on this algorithm, see the SDS.pdf file.
- 5. When finished using the Four-Year Plan Tracker, open up the Docker Desktop application (detailed in the Installation Instructions) and "stop" the container. The next time you want to use the Four-Year Plan Tracker, open up the Docker Desktop application and "start" the container. This will allow the data stored (via pickle files) on your machine to persist within the container and load at localhost:5000 after shutting down your computer, as well as free up memory on your machine by not constantly running in the background.
  - a. Keep in mind that if at any point you "remove" the container via the Docker Desktop app, the saved data will be lost. However, rerunning the run.sh script will create a new container for future use.



**Figure 1**The Four-Year Plan Tracker landing page.



**Figure 2**The course plan modification page.



**Figure 3**The course plan forecast display page.