

Team: Night Raid

Project #2: Move that Bus

Date Started: October, 2016

Date Ended: December, 2016

Executive Summary

Overview and project aim -

This project involved the creation of Java based program to allow a user to find available times and room numbers they could switch a class to. The primary aim of the task was to create program that would take in a course number as input, ask the user if they wanted to prioritize by seniors, and output available options. We accomplished the project aim by taking a given CSV file with student information, implementing that data within a relational database, and be able to access and report possible availabilities for the user to pick through a GUI.

Development -

Overview –

After being given a CSV with student data, we imported that information into a relational database. We wanted our clients to be able to use the database without needing to download external software, so we used SQLite. Then we developed code to access SQLite with Java APIs. We then developed functions to use accessed data to achieve our objectives. The project was generously encouraged to be done within a Test Driven Development; much of the development process should have been formatted in this way. Add test, run test with expected failure, write the code for the test, run test, refactor code, and repeat. Our development process did not transition into a TDD until the third iteration. The first two iterations included us making functions without real tests. Though work had been completed, much of it did not make it to the final showcase. During the third and final iteration the tests we created helped us write code that centered on the client's needs. We then created a GUI and UI for the Client.

Features of Development –

There were three primary features used to develop this project:

Cucumber – helps non-programmers understand the functionality of their software as well as help programmers develop test first cycles that are easy to understand and establish direction

SQLite – Transportable Database used to convert CSV to a Schema

GUI and UI – Allows user to interact with the software

Statements about final state of device-

When entering a CRN, a user can then select the days they would like, whether or not they want to prioritize by seniors, choose a time, and choose a room. The program gives possible solutions if there are classes available. The GUI and UI are stable with no apparent bugs.