

## EE/CprE/SE 492 WEEKLY REPORT 10

Aug 22 – Sep 16

**Group number:** SDDEC22-09

**Project title:** Class Scheduler

**Client &/Advisor:** Vicky Thorland-Oster & Mai Zheng

### **Team Members/Role:**

Zachary Bunch: Team Leader and Back-End

Connor Gaecke: Back-End

Chris Horvatich: Front-End

Charles Mulderink: Front-End

### ○ Weekly Summary

This week the group primarily focused on getting familiar with the new Front-End GUI tool “Tkinter”, getting the class files created for the various objects within the program, and researching a genetic algorithm to be used to generate the optimized class schedule. The Front-End decided to move towards the use of a new GUI tool that will allow for greater functionality and more efficient code development. The Back-End worked on getting the outline for the objects created via class files. The Back-End also researched the possibility of using a genetic algorithm as the algorithm used to optimize the course schedule.

### ○ Past week accomplishments

- Zachary Bunch: Worked on creating the class files for the various objects, and setting up various things within the GitLab repository like the issues, issues boards, and Wiki.
- Chris Horvatich: Created a way to convert CVS to python dictionary. Setting up GUI to display info for classes. Getting CSV to display on GUI.
- Connor Gaecke: Research into genetic algorithms and applications in regards to using it for a sorting algorithm.
- Charles Mulderink: Researched new API's and started learning tkinter. Created a tree view widget to display class objects in left panel. Also structured the app first with frames then with panels.

- **Pending issues** *(If applicable: Were there any unexpected complications? Please elaborate.)*
  - Zachary Bunch: Getting the “Schedule” object to convert to a JSON file and being able to convert the JSON file back to the “Schedule” object.
  - Chris Horvatich: Working with Zach to see how he wants the Dictionary file to look.
  - Connor Gaecke: N/A
  - Charles Mulderink: Doing live edits through the gui go to the backend and then come back to the other front end widgets without lag.
- **Individual contributions** *(Creating this section is optional, but it is **Required to include the “Hours Worked for the Week” and their “Total Cumulative Hours” for the project for each member somewhere relevant in your report. Your individual weekly hours should be at a minimum of 6-8 hours for this course. So please manage your time well. Also, ensure that individual contributions support your claim to the weekly hours. Be honest with the reports.)***

<u>NAME</u>	<u>Individual Contributions</u> <i>(Quick list of contributions. This should be short.)</i>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Zachary Bunch	Creating class files and updating various things within the project repository on GitLab	5	60
Chris Horvatich	Started to learn how to use tkinter, created a way to view class properties from a CSV file. Display a CSV file within the GUI. Convert data from CSV to dict.	6	60
Connor Gaecke	Research into genetic algorithms	5	57
Charles Mulderink	Researched new API's and started learning tkinter. Created a tree view widget to display class objects in left panel.	6	60

- **Plans for the upcoming week**
  - Zachary Bunch: Get the conversion between the Schedule object and JSON file functional, and to help Chris with getting the conversion between a csv file and the Schedule object completed.
  - Chris Horvatich: Work with Zach on how he wants the CSV to be converted (easiest way to edit the data within each class object).
  - Connor Gaecke: Creating classes and class files for algorithm back-end. Work on reading/writing correct information to Schedule object.
  - Charles Mulderink: Make tree view represent what is stored in the objects. Have the objects show their properties when clicked.

- **Summary of weekly advisor meeting**

We met with our advisor and touched base at the beginning of the semester. We mentioned the current state of the project and what our goals are before the first PIRM meeting. The advisor also shared their expectations for the semester to the group.