

## **Sprint 2 Report**

### **Introduction**

The task for sprint 2 was to create an Excel spreadsheet where a person is able to add upwards of five courses into five different cells. Given the courses, a VBA script is run to generate and display a course schedule for the week. The team split up this task's requirements into various subtasks, which are documented below in subsections.

### **Converting HTML to CSV**

The member responsible for this task is Eric. Eric spent about an hour converting HTML to CSV. He then spent most of his time researching how to break up the meeting lectures, labs, seminars, and exams. There were cases that had multiple lectures, or different order of lectures, seminars, labs, and exams.

### **Transformation of Raw Data to Scheduled Data using VBA**

Development of this task by Tinson took on incremental steps. Before the CSV was complete, the capability to display data on one sheet by matching data from another sheet was implemented using VBA with a set of dummy data. After the CSV was complete and imported into Excel, development towards parsing the meeting data using regex in VBA was a significant hurdle. Overcoming this challenge opened the capacity to identify days, times, and section types from strings of meeting information. With this information, marking and labelling of sections onto the schedule was developed next. Final touches such as the inclusion of borders around cells, and a feature to clear the schedule was implemented with the extra time.

Alongside this, an experiment with dynamic course loading was done by Ryan. It was noted that some courses were yet to receive times for lectures or labs and were simply set as TBA, so a course info table was added which would update when a course was added to the selection to inform the user that their choice had been noted even if there were no course times to see. It also acted as a course preview essentially before the schedule was generated by the user. Ryan also developed the design of the course selection sheet which included elements such as the calendar and course info boxes.

### **Testing**

The validation and verification testing process was executed by Rithik with assistance from Luka, Tinson and Michael to help patch any bugs found and perform test cases given from a list compiled by Rithik. These test cases were made after

manually going through all the data and documenting all potential problems and edge cases which could cause the logic to fail. Through this process, multiple bugs were found, and their logic corrected, to ensure proper functionality of the program.

### **Course Conflict Feature**

The members responsible for this task were Luka & Michael, along with the help of Tinson and Rithik. The members were tasked with the implementation of displaying conflicting courses on the interface. Conflicting courses were determined by the timings of lectures, labs, and seminars. The two conflicting courses were then displayed to the user allowing the user to make further adjustments in their schedule to resolve the conflicts.