Project Development Plan

Classroom Scheduler

Introduction

Classroom scheduler is a computer simulation program that will take as input CSS class scheduled of offered classes at UW Bothell as well as faculty and their capabilities and produce possible organizational patterns in order to best determine future resources in the CSS department. The program will attempt to fill the given schedules with the given faculty in as many ways as possible. Any schedules that are not filled completely will artificially fill those schedules with potential part time faculty. Classroom scheduler will report the information in terms of average class schedule requirements as well as number of schedules that require additional faculty members.

Deliverables

At the end of the project, the classroom scheduler project team will deliver the source code for classroom scheduler program, which includes importing given schedule information and faculty information, code for generating numerous schedules with given input and the output information which states founding results. Test harness code will also be given as well as an operation Manual for the Classroom scheduler program.

Personnel

Marc Fieser – A current CSS student at UW Bothell, coding experience is limited to early stages of CSS core curriculum. Minimal experience with Java, C++ and python languages. Marc will be responsible for everything at this point.

Technologies

Classroom scheduler will be coded in python language and will include the NumPy scientific package and MatPlotLib package as well. GitHub online git repository hosting service will be used to collaborate with other group members. Microsoft PowerPoint could possibly be used for presentation purposes.

Benchmarks

1. May 20, 2015 - Milestone one will consist of classroom scheduler utilizing input files and populating variables within the program. Marc will conduct the coding for this milestone. Deliverables consist of source code, and example output of variables utilized by program.

2. May 27, 2015 – Milestone two will be the completion of one schedule being performed by the Classroom Scheduler. This is to show that the program has the ability to fulfill the scheduling requirements with the given input. Marc will also be coding this portion of the project. Deliverables consist of source code and example output of completed schedule.

3. June 1, 2015 – Milestone three will be the completion of multiple schedules produced by the classroom scheduler program. Any schedules that are not completely filled by faculty members will be filled with potential future faculty members. This will be the completed project. Deliverables consist of all deliverables mentioned above in the deliverables sub section. All of the coding for this portion will be conducted by Marc.