Achilles Ecos

15-112 Project

TP1 Project Proposal

**Project Description:** The name of the project is “CMU Map” and it will basically allow any user to find the most optimal route within the CMU campus. It will be a basic map navigation from getting from one place in CMU to another part.

**Competitive Analysis:** The project will be similar to most maps on the Internet, such that it will return the most optimal route from a single place to another place. My map application, like most others will also highlight the route that one should take to get to their destination.

It becomes a bit different from other projects when it gives the user the option to place their schedule in order and return a list of paths that would be the most optimal to get from class to class. This would be important for students who want to maximize their time studying and not waste time walking inefficient routes or any other reason.

**Structural Plan:** I have three files. One will be the dijkstra’s algorithm which will contain the class Graph, and its functions are addEdge(), getNeighbors(), getWeight(). The dijkstra() function itself, will return two dictionaries. The first is the distance dictionary and the second is the previous dictionary.

**Algorithmic Plan:** I plan on approaching the aspect of having the schedule

Parsing .ics files from schedules