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MET CS 521

Final Project Summary

Project Title: Boston University Parking Navigation

My project is an application that will help navigate users find the best possible parking lots within the Boston University Campus. This application is meant for students, as faculty have different rules and permits allowed (this could be an added function in my program). I created this application because as an exchange student who commutes to the university, I first had a hard time understanding where and when I can park, and which locations were closest to my classes. Therefore, I created this application, that will prompt the user to answer a few questions regarding building name, permit, and time.

The program will take the user inputs and run the code to provide them with the lot name and address for which the user can park conveniently without any regulation errors. I first created an excel database with all the parking lot information and building names. Then my program imported specific data from excel into dictionaries or lists. My application uses class methods to find out the area of the building, garages located in the area, and address. I have a function to display lots that are within the user permit regulations. I also used another function to check the time regulations. The application also counts the number of spaces left in each parking lot. The application consists of two classes, one for garage info and the other for the space numbers in each lot. You can see in the image on the next page of the reference map I used from BU on how I sectioned off the areas.

I think in the future, I can add to the application, a class ID function to search the building and time of the class so the user does not have to input them. I could also add the faculty options as well. In addition, it would be cool to create an actual app, where the user can apply for permits, reserve parking, and have an interactive map, which is much higher than the level of the class, but I think it would be a cool idea for the university to have. I also believe there are some regulations on each parking lot that I did not fully comprehend so I disregarded this and just keep the data to be simple and easy to read. A picture containing map

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