**Dewey Decimal 7**

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IS 436

Deliverable 2

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**What we probably don’t need:**

1. We probably don’t need point 1B. There is no “as-is system” in place for our application, so there’s effectively nothing but improvement to be gained from this application, unless we want to discuss the current failings of having nothing implemented.

**User Requirements:**

1. Register to use the application
2. Sign into the application
3. Designate Permit Type (idea: have application sort parking by permit)

**Functional Requirements:**

1. Display Available Parking in open lots (Application/Displayed signs).
   1. *Information-Oriented*: The system has to update to display real-time information that’s accurate for the user’s use.
2. Sort Parking availability based on permit type (Application).
   1. *Process-Oriented:* Without knowing the permit type, the application should just show open parking, but if we allow the option to narrow your permit type, then restricting available parking becomes a process.

**Non-Functional Requirements:**

1. **Opertional:**
   1. System should run on Androids.
   2. System should run on iPhones.
   3. System (Application) should be able to be integrated into Smart-Parking Technology System.
   4. Should presumably have a web portal interface for administrative purpose

**2. Performance:**

1. System should update within 1-5 minutes (we need to determine the refresh rate)
2. System should almost always be available, but especially during peak campus hours. Maintenance can be done during the night hours when parking is openly available.
3. The application should be able to support thousands of students at once. Determine that amount of server space needed.

**3. Security**

1. Only administrators should be able to access database containing all information regarding registered users.
2. The system should obviously include protection against any viruses, or exploits that could otherwise expose private information (although we shouldn’t be taking any real personal information)
   1. **NOTE:** Would there be a paid version of the application? In which we ***would***have sensitive information such as someone’s credit card.

**4. Political**

1. Offer the application in different languages?
2. Perhaps an agreement to use a certain brand Smart-Parking technology sensor - contractual agreement?

**Interview Scenario:**

UMBC’s Inquiry on the Mobile App:

Q: How does this app work?

A: Our app will be able to determine how many parking spots are open in a specific lot at UMBC. The app will gage how many cars enter and exit a lot to determine the amount of spots that are opening up as well as being filled.

Q: What are the requirements for the app?

A: The requirements for this app include a team with skills in app development as well as the need for the installation of laser sensors in the parking garages and lots at UMBC.

Q: In terms of cost, what will it take to make this app work?

A:

Q: Will this app accommodate those with special needs?

A: Yes, in the app the user will have the choice of identifying there specified parking permit, additionally if the user has a handicapped pass this identified as just another option.

Q: Will this app be able to support additional expansions to our campus?

A: This app will be able to support additional expansions to the campus so long as sensors are incorporated in these expansions.

Q: In the future can this app be more than just a parking app?

A: While this app currently is just the means determining how many people are parked within a certain area it can be improved to be much more. Potential upgraded to have a better user interface that would serve as a GPS to assist the user in finding spots with greater accuracy.

Student’s Inquiry on the Mobile App:

Q: Will that app be supported on IOS and Android?

A: Yes the app will be supported on both platforms.

Q: Will this app consider my parking permit?

A: Our app will take into consideration your current parking pass. This selection will be made through the user while they are running the app.

Q: Is there a paid version of the app?

A:

Q: How accurate is the application in finding spots?

A: Currently our app is taking into consideration the amount of cars that enter and exit a specific parking area, our numbers will represent the number of open spaces in the parking area. Although we are looking to increase our accuracy through various sensor technologies that will allow the user to know exactly which spots are open in a specific parking area.

Q: Will there be voice alerts for open lots (as to avoid using your phone while driving)?

A: No

**Use Cases: (App Only?)**

1. User Registration - Link to allow user to register for the application
2. User Login - Allow the user to login to the application
3. Profile Settings - Allow the user to declare their permit type / anything else appropriate for a profile setting.

**Use Cases: (Webportal only?)**

1. Admin login - allow administrators to login and do administrative duties