**System Request – UMBC Parking Application (iOS/Android)**

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**Business Need:** We created this project to offer a more reliable solution to UMBC’s parking issues. With the installation of smart-sensors and a developed phone application, students will be able to locate open parking available throughout the campus without driving around searching for it. Within the current infrastructure, there’s no reliable way for students to know if parking available within certain areas. That uncertainty creates a lot of the traffic congestion we see on campus.

**Business Requirement:** Using this application over the current situation where parking sensors are not installed would allow people at UMBC to find parking faster. The specific functionality that the application should have includes the following:

* Ability for people to know how many available spots are in a lot or garage.
* Ability for people to know which spots are available for circle parking.
* Give users the option to filter the applications view on what spots are available based off their permit type.

**Business Value:** We expect that the implementation of this application will showcase UMBC as a technologically advancing school which will lead to the follow:

* Encourage new students to come to UMBC based on their initiative to advance technologically.
* Encourage existing students and staff of UMBC to stay based on be ability to park efficiently.
* Allow guest who visit UMBC to speak highly of the campus based off these advancements

**Special Issues or Constraints:** Integrating the physical infrastructure for the system would most likely need to be done during non-peak hours. The integration of the system shouldn’t conflict with the current peak hours of the semester. Storing the application data on UMBC cloud servers and accessing the data from the server.