University of Regina | FACULTY OF ENGINEERING & APPLIED SCIENCE

PROJECT SCOPE STATEMENT	
Project Name	EZParking
Project Deliverables	**Detailed Description**
Collect the destination	**User** Able to input the destination **Program** Store destination into the backend and use them to analyze the most appropriate parking lot. **Interface** There will be a drop-down menu where users can input their destination
Provide the optimal parking solution	**User** Input destination **Program** Use a backend database to calculate the optimal parking solution, and give the user a choice if they want to park in M, Z, or meter areas. **Interface** There will be some buttons that indicate different areas, and the destination and approximate time will display aside respectively.
AI detects vehicles that enter and exit parking areas	**Program** Based on YoloV5 object detection, the program can calculate the number of vehicle entering or exiting the parking lot, and the algorithm will also update these data to the backend.
Adding and editing waypoints	**Admin** Admins are able to add and edit waypoints to the map and define the parking area and the number of parking spots.

	Backend System will store the waypoints that are provided by the admins, and use google API to calculate the length of the edges.
Project Exclusions	
Bike or motorcycle parking space recommendation In our capstone project, we don't consider adding bikes and motorcycle parking spaces recommendations, at least at this time.	