## PARK.mk

## **Project description**

The idea that led to the realization of this project was the use of an open source platform for mapping and navigation such as OpenStreetMap and the use of different data that is already generated from different sources.

All those components that will be integrated with our web based application will be in use to users ,who with small efforts will find the most suitable parking place for their vehicles .As per most suitable parking spaces is meant the nearest and the cheapest parking spaces that are offered by different parking lots that choose to collaborate and share data with our application.

## **Functional requirements**

- 1. The system shall ask the user for permission to access their location.
- 2. The system must display all the parking lots.
- 3. For every parking lot the system should display the name,address,price per hour and available free parking places.
- 4. The system must provide an option for selecting a location and radius.
- 5. The system must provide an ordered list of parking lots based on price
- ascending/descending.
- 7. The system must provide an ordered list of parking lots based on location proximity ascending/descending.
- 8. The system must provide a list of parking lots that have free slots.
- 9. The system should be notified for every change of decreasing/increasing parking places at every parking lot.

## **Non functional requirements**

- 1. The system shall achieve 99.5% uptime.
- 2. The system must load within 2 seconds when accessing the app.
- 3. The system must display the free parking spaces within 3 seconds on the demand of the user.
- 4. The system should be updated at night between 01:00 AM and 02:00 AM.
- 5. The system shall use the Ajax framework to request data from a web server.
- 6. The system must use cookies to save the users' previous activity.
- 7. The system should contain a security and privacy policy.