

Lab # 7

GPS and Maps

Objective

To build an iPhone application that use the GPS and Map.

Key Concepts

- CoreLocation
- MapKit
- UI

Requirements

Build an iPhone application as shown in **Figure 1**.

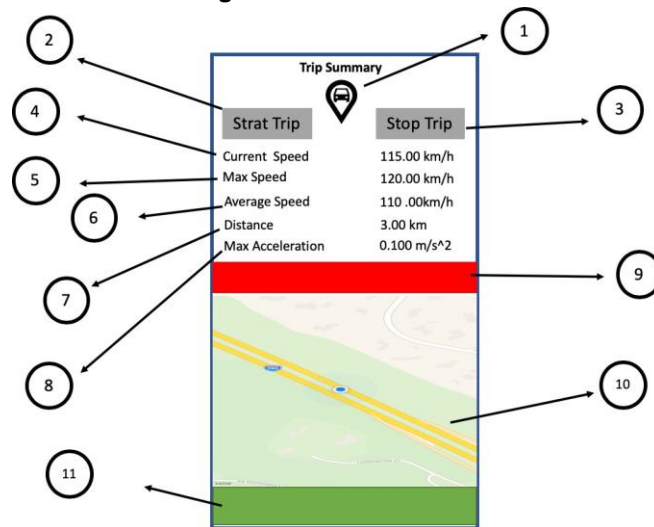


Figure 1 The overall layout of the application

1. The Logo of the application. Use a logo of your choice and do not use the logo provided in the previous labs (5%)
2. The Location Manager starts providing the user location once the user clicks on the start trip button. (5%)
3. The Location manager stops providing the user location once the user clicks on the stop trip button. (5%)
4. The current speed of the driver must be shown during the trip. (5%)
5. The max speed that the driver has reached since the start of the trip. (10%)
6. The average speed of the driver since the start of the trip. (5%)
7. The distance that the driver has travelled since the start of the trip. (10%)
8. The max acceleration (absolute value) the driver has accelerated since the start of the trip. (10%)
9. The top bar should be only red once the driver speed has exceeded 115 km/h. (5%)
10. The map shows the driver's location during the trip and zooms in to the driver's location (5%)
11. The bottom bar has to be green during the trip and gray otherwise. (5%)
12. Match all the units: km/h, km and m/s^2. (5%)
13. How many kilometres will the driver travel before exceeding the speed limit (115 km/h). (5%).
14. You should write a clean code and follow/use the proper naming convention, functions, classes and structs. (10%)
15. Answering my questions during the lab session. (10%)

Use the Freeway Drive location option in the simulator.