

## **Find My Car**

Presented to

CSCI 4237: Software Design Handheld Device

Department of Computer Science

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Submitted By

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## **Introduction**

Find My Car application is used to remember where you parked your car and later guides you back to your car. This application uses GPS coordinate to remember where you parked with the push of just one button. It also displays all essential information like from how long you parked your car, address of the parked location, GPS coordinates of the location etc.

## **Background**

The application is written in java (JDE 1.6) using the Eclipse IDE. My application is written for Android devices 2.2.

## **Specifications**

When the Application is started it will ask you to make sure that GPS of your cell phone is switched on. You can store upto three car locations at one time.

You can also add the description that why you located the car at that place and later when you locate your car it shows the complete route with the description, address of the parked location, GPS coordinates of the location etc.

and the time(from how long is the car parked).

## **Technologies Used**

For designing this application I used android Google SDK(Google API 2.2)

I also used Xmlpullparser to pass the route information obtained from the Google.

I also used external Google map library.

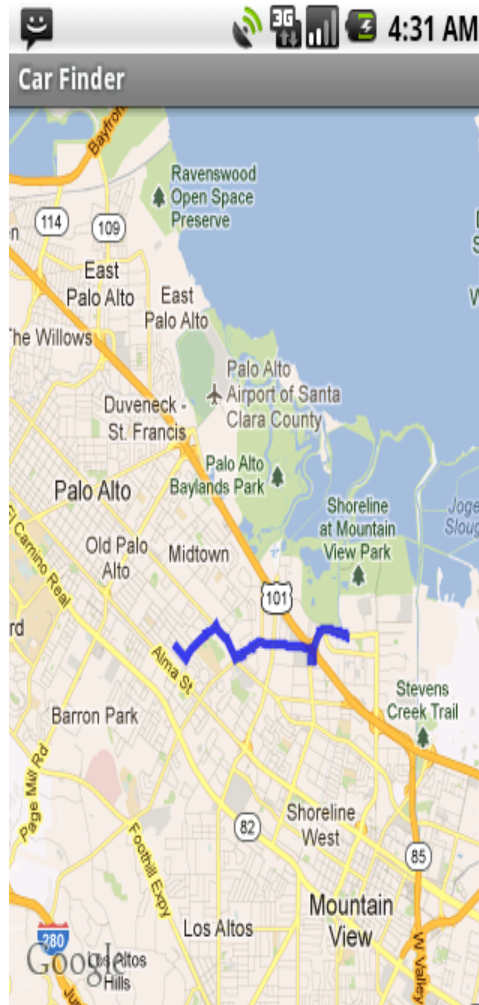
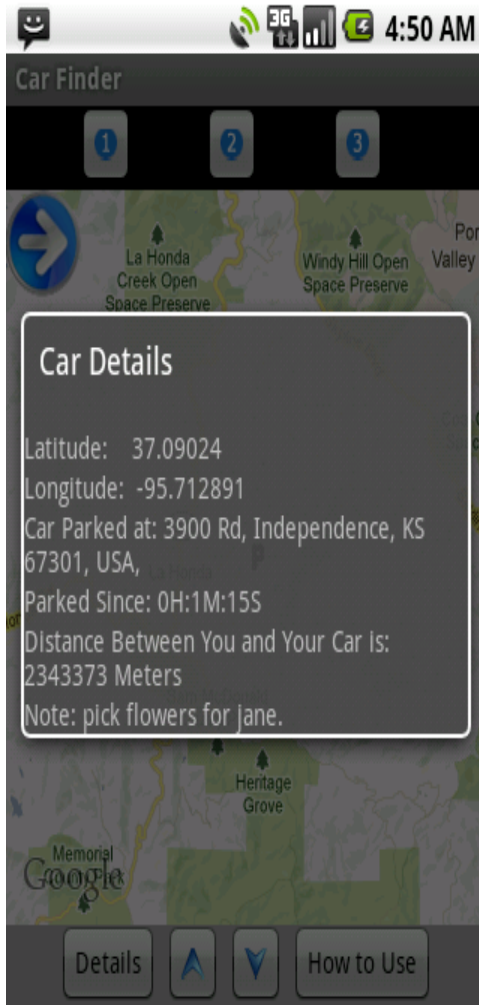
## **Modules**

- Enabling phone GPS
- Selection of 3 cars
- Displaying the current position on the map
- Saving current location
- Showing the time at which location was saved
- Attaching the description
- Displaying the details (getting the physical address by reverse geocoding, showing car park location)
- Obtaining route info and parsing it

## **How to use my Application**

- When you first start my application it ask you to make sure that GPS of the device is enabled.

- There are three buttons (1 ,2 ,3)on the top of the main screen. With the help of these buttons you can store up to 3 car locations at one time. When you press button 1 it will allow you to store the location of first car, similarly button 2 and 3 will allow you to store the location of other cars.
- Letter P on the Map shows your current Location.
- You can Zoom in and Zoom out of the maps using zoom in and zoom out buttons on the bottom of main screen.
- There is How to Use button, which explains you how to use this application to locate your car.
- When you press the Menu button on your phone it shows you two options, either Record car Location or locate your car.
- When you press Record Car Location it asks you if you want to add description of the Location
- When you press locate a car it will show the Latitude and Longitude of the of the location where you parked the car, It will also show you the time since you parked your car, Distance between you and your car and the description why you parked your car.



## My Experience

One of the problems I faced while developing this application was drawing a route on a Google map. For this, I requested point-to-point information from Google. After that, I had to parse and retrieve the route details along with coordinates. Then I projected those GPS coordinates onto the Google map. The

information obtained (information was in KML format). The main problem I faced is to add the overlay(route information) on the map.

## **Conclusion**

The class was exciting and I learned a lot about developing the application for Mobile Devices. My project taught how a project is designed starting from scratch (Gathering requirements, dividing into modules etc.). Also it taught me how to use GPS coordinates, Google Map Library and Services. I worked on each class separately, and then brought them all together. The final application worked well and I am completely satisfied.