

Emergency Breakdown Services using Android Application

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Abstract - Many android applications are available for intimating emergency services. Our emergency breakdown service initializes the apps and directly connect with google GPS system and it shows the user current location. If the user in one location wants to search the hospital within 2km range. Our project will show the name and address or location of all hospital those are in the range and the user will be able to select any one hospital, its shows the way to reach our destination. This process is same as that for the petrol pump and same for the service station and police station.

Key Words: Android, emergency services, breakdown services, accidents, nearby places, hospitals.

1. INTRODUCTION

Now-a-days, many android applications are available which provide many smart things to the users. Google's Android Operating System in Mobile phones are still relatively new, however, Android Operating System has been progressing quite rapidly. Easy access to thousands of applications via the Google Android App Market - When you love to install applications or games, through Google's Android App Market can download applications for free. Conceived as a counterpart IOS, Android is a graph showing a significant development, it certainly cannot be separated from supports major mobile phone manufacturers who participated to bring mobile-phone operating system Android. With today's traffic conditions there is an ever-increasing need to provide motorists with travel information and to be able to accurately locate individual vehicles when dealing with incidents. It is often quite difficult for motorists to pinpoint their location when a breakdown or accident occurs. This is particularly apparent on motorways when motorists use their mobile telephones instead of the emergency telephones. The police motorway controllers and motoring organizations then have the additional task of trying to locate motorists instead of relying upon automatic identification by the motorway emergency telephone system. Equally, the public find it difficult to accurately describe their location even on familiar routes, particularly in the heat of the moment. With the advent of satellite navigation, mobile telephones and advanced computing it is now possible to pinpoint motorists and provide telemetric services to assist them. The subject of this project is an integrated system that has been developed by the Automobile Association to provide Emergency services. The system described is currently being deployed and offers an operational service to users.

1.1 EXISTING SYSTEM

- In existing system, they use getting current location alone for finding the location.
- If we want to identify the nearby location means it need some other application which contain some drawbacks.
- That is we should give the location and it will search the nearby location for what we given in searching.

Disadvantages:

- It is not suitable application for emergency needs.
- It is not feasible. Because if the user in unknown location first they find her location using one app and searching nearby location another app.

1.2 PROPOSED SYSTEM

- Our proposed emergency breakdown service which provides the user friendly environment.
- It is easiest way to identify the location as well as nearby needed locations.
- Our application provides nearby location information such as petrol pump, police station, service station and hospital.

Advantages:

- It is one of the best application used while emergency.
- Easy to use.
- Provides both location and nearby needs.

2. INTERFACE

Direct manipulation, using touch inputs, that loosely correspond to real-world actions, like swiping, tapping, pinching, and reverse pinching to manipulate on-screen objects, and a virtual keyboard are the characteristics on which Android's default user interface is based. The response to user input is designed to be instant and provides a fluid touch interface, often using the vibration capabilities of the device to provide haptic feedback to the user. Internal hardware such as accelerometers, gyroscopes and proximity sensors are used by some applications to respond to additional user actions, for example adjusting the screen from portrait to landscape depending on how the device is oriented, or allowing the user to steer a vehicle in a racing game by rotating the device, simulating control of a steering wheel.

This application is made with the thought in mind, that after an accident or a breakdown, the user is in a state of panic. Thus the interface of the application is designed in a simplistic way, with direct access to services provided by the application.

The two options available when the application is opened are “MyPlace” and “NearByPlaces”. “MyPlace” provides the users current location. This is helpful when the user has to share his current location. “NearByPlaces” provides search for services such as Hospitals, Police stations, Petrol pumps, Auto garages, etc.

3. APPLICATIONS

- In case of accident user can use emergency services like police station or hospital.
- The app can be used to locate nearby hospitals in case of injury. The user can get directions to the hospital and also the contact information.
- The user can search nearby towing services for help in case of accident.
- Provides both location and nearby needs.
- Nearby emergency services such as petrol pump, hospitals, garages and police station can be searched and located very easily by the user.
- The user can get directions to these places.
- The app can be used by every owner of car, two wheelers, etc. or transportation system.



Android provides the ability to run applications which change the default launcher and hence the appearance and externally visible behaviour of Android. These appearance changes include a multi-page dock or no dock, and many more changes to fundamental features of the user interface.

4. MODULES

4.1 HOME PAGE

- Our home page displays the current location of the user.
- GPS is achieved by using google map class in our project.
- This module gets the current latitude and longitude of the current location and marked it in google maps.
- When we click on the toggle button it gives the current location of the user.

4.2 GOOGLE PLAY SERVICE

- For running our emergency break down service application we need the interaction with google play service.
- Google Play Services is required for Google Maps and Google Places.
- Google Play service is used to update Google apps and apps from Google Play.
- This component provides core functionality like connection our process with GPS, authentication etc.,

4.3 CURRENT LOCATION IDENTIFICATION

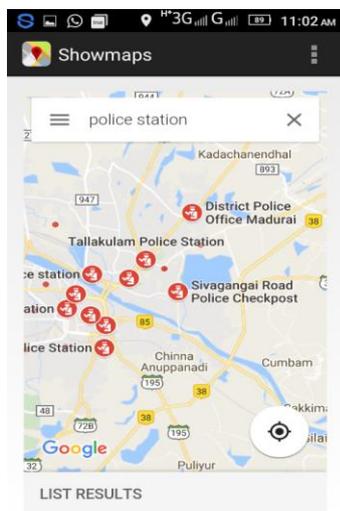
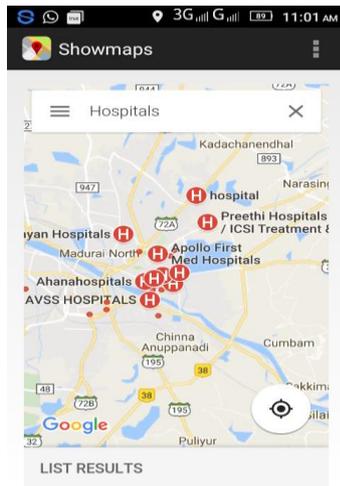
- For getting current location we have to add some permission in our project file.
- The permission are,



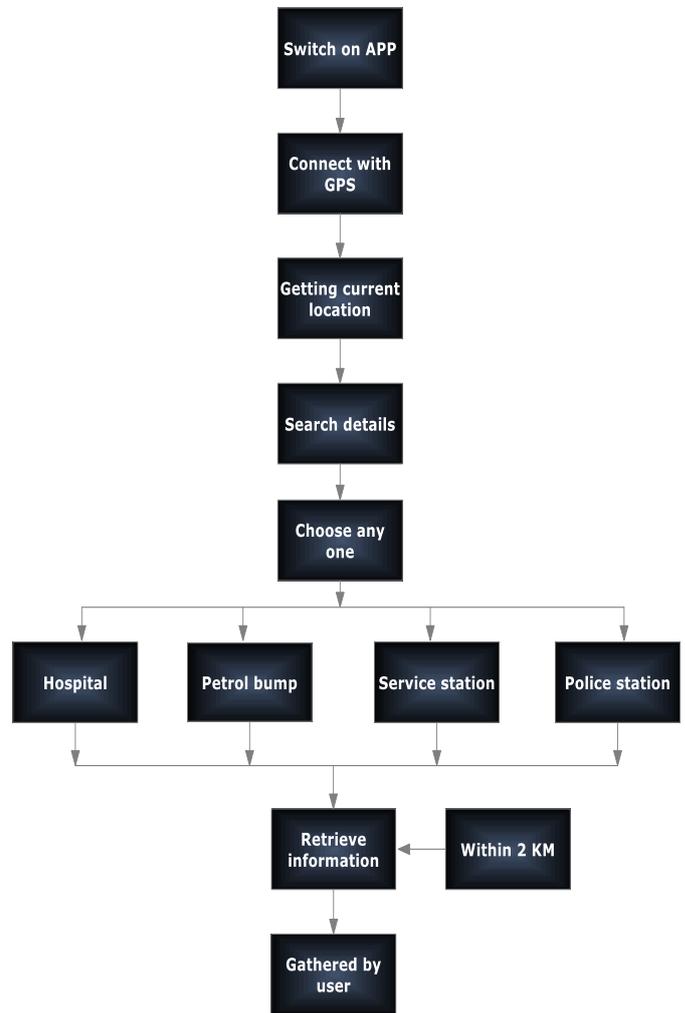
- MAP RECEIVE
- READ SERVICE
- COARSE LOCATION
- NETWORK STATE
- And also create API key for our project package name in Google console.

4.4 SEARCHING NEARBY LOCATION

- For searching nearby location JSON and marker classes are used.
- We get the searching features in either spinner or textbox.
- Google map class which is used for identifying the nearby locations.
- We have the option such as petrol pump, police station, service station and hospital.



5. FLOW DIAGRAM



6. CONCLUSION

Thus our emergency breaks down service give better location result. Our application easily identifies the nearby location which is very useful to the user who uses it in emergency needs. The application provides navigation to the nearest emergency service as selected by the user. It also provides contact information of these services. This approach makes the user experience very easy and performs better than the existing system in crucial times like this.

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