

# Auto Sawari-An Android Application

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*Abstract*— It is a Dynamic GPS based Auto-fare calculator. This application helps in bringing fairness to Auto Rickshaw industry. Auto Sawari application helps the user to be familiar with his travel, check where exactly he is being destined to, checking the fair and the distance he/she is travelling. It acts as a guard against faulty meters and is an application so simple which anyone can use easily.

The designed application works using Global Positioning System (GPS) and Global system for mobile communication / General Packet Radio Service (GSM/GPRS) technology that is one of the most common ways for vehicle tracking. This application uses the GPS module to get geographic coordinates at regular time intervals. The GSM/GPRS module transfers and updates the Auto location to a database. The Google Maps API is used to display the Auto on the map in the application. Thus, users will be able to continuously monitor a moving Auto on demand using the application and determine the estimated distance and time for the vehicle to arrive at a given destination. Here passengers will find the nearby Autos and will send the request to any one of them. Then Auto driver will receive the pop up message and he will acknowledge the passenger .So passenger will get picked up by requested Auto.

*Index Terms*—GPS, GPRS, GSM, API

## I. INTRODUCTION

Nasik is a place of GOD where after every 12 years people around the country gather here in the form of Kumbhmela. During this period transportation is mainly focus and the only means to travel within the city is Auto-rickshaw. We propose a system for the people who can track nearby auto rickshaw using Android smart phone.

## II. LITERATURE SURVEY

MeetYou [3] – Social Networking on Android Published in: Roedunet International Conference (RoEduNet), 2013 11th Date of Conference: 17-19 Jan. 2013 .It is used for taking idea of available Android location and messages services are used for finding an approximate location of a mobile phone running this program and then sharing it via SMS. Information is being displayed using default components provided by Android platform and also more complex elements including various lists CWAC, Google Maps and augmented reality using Mixare Library.

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A New Approach for Location based Tracking [2] - Shaveta Bhatia<sup>1</sup>, Saba Hilal<sup>2</sup> Research Scholar, Manav Rachna International University, Faridabad, Haryana, India Location Tracking seems to be an interaction of various technologies such as Mobile telecommunication systems, Cell Identification, Global system for Mobile Communication (GSM), General packet Radio service (GPRS) and Geographic Information systems (GIS). In Today's world, the development of smart phones is gaining significant progress in the market with extreme performance parameters. During the last years the development of mobile devices has gained significant progress with respect to memory abilities, advanced processing power and higher transfer rates to name only a few performance parameters. Navigation and positioning is one of the most enormous features available today, most liking and useful entity for the user. These features are now available in mobile phones. When Localization, Positioning and telecommunication technologies are combined, they lead to basis of various real time applications for future.

A Location & Time Related Web Service Distributed Selection Approach for Composition-2010 Ninth International Conference on Grid and Cloud Computing 978-0-7695-4313-0/10 \$26.00 © 2010 IEEE With the development of Internet and communication technology, more and more web applications are developed and accessed through the Internet environment. Especially the rise of the technology of cloud computing changes the management mode of web services and brings new vigor and vitality into the web services.

For a long time, composite web services are accessed from a single point.

## III. SYSTEM ARCHITECTURE

This application employs four hardware/software components in the smartphone, described as follows. The smartphone is built-in with both a GPS receiver and a Wi-Fi network interface card, which can receive radio signals from GPS satellites and Wi-Fi APs, respectively. Based on the GPS readings and the information from the Wi-Fi APs, the application can perform geolocationing to estimate the current location of the user. The database is designed to store personal-meaningful locations and location-based tasks, which are stored in separate tables. If a location based task exists in the database, then the application will compare the currently sensed location with the location associated with the task. When the user is physically close to the predefined location, the reminder then will be triggered to remind the user of his/ her task.

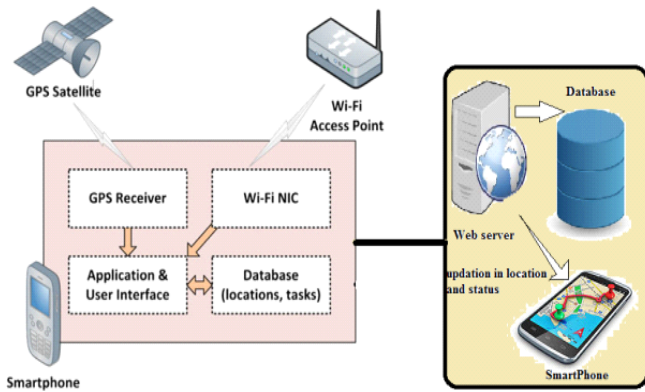


Fig 1. System Architecture

#### IV. CONCLUSION

The information presented herein and the conducted research for the purpose of this thesis lead not only to a system that supports autoservicing but also can be used to create a similar system, which is based on a client-server architecture and uses mobile application working on android OS.

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