

Tour-Pal: with you, anywhere

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Abstract- This project presents the architecture and implementation of a location based application, called Tour-Pal. It provides search service based on the user's current location. If the user is in any emergency situation or needs to find places (such as hospital, medical shop, police station etc) this application will give the nearest available addresses of the place searched. All these elements will change accordingly as the position of the user changes. Users are permitted to get tour guidance information that they are in need of, anytime and anywhere. The tourist data can be browsed using an Internet map service, Google Maps. This application can be used by people new to the city too, for finding places like hospital, bus stop, railway station, airport, auto-stand, hotels etc also to find places that are either required in case of emergency or in day to day life. The idea behind the system is simple: using personal, mobile wireless computing devices, user can get the tourism guide ubiquitously.

Keywords: Android, Global Positioning System GPS,

I. INTRODUCTION

Tour-Pal is an application that provides search service. The focus of this project is on software for location based application. We are not just interested in the location but also other elements that are essential for different types of people in their everyday life, such as

1. Hospitals
2. Medical shops
3. Police station
4. Petrol pump
5. ATMs
6. Restaurants
7. Public toilets
8. Bus stop
9. Railway station
10. Airport
11. Auto stop
12. Vehicle repair shop

All these elements will change accordingly as the position of the user changes. This application shall help the user in finding out the nearby detailed information regarding certain important places linked to their current position. Important places such as hospitals, police station etc. This will include information about: where the above mentioned elements are present at nearby and detail about these elements. Here, the details include address along with Google map showing the exact route from user's current location and other basic info like contact no, email-id etc.

The design, implementation and deployment of a location-based application, with the mobile phone as a platform. This application permitted users to get tour guide information they need anytime and anywhere. The tourist data can be browsed using an Internet map service, Google Maps.

II. LITERATURE SURVEY

S .Bhattacharya had proposed an approach, a tour guide application called Mobile Campus on android based mobile platform for SRM University campus. Near field communication (NFC) is a set of standards for smart phones and similar devices, it establishes radio communication with each other by touching them together, usually not more than a few centimeters. This tour guide application includes functionality such as locating current location of users, displaying university campus map, route direction of entire university shuttle and gives small description & contact information of important places on the campus. [Ref. 1]

Our project of android based user guide system presents the user with map of the specified city depending on its present location registered by the user of the android phone. it provides information about important public amenities like hospitals, railway stations, airports etc. it provides information about important public amenities like hospitals, railway stations, airports etc. It comprises of all the details of those places and how to navigate to the locations. Our project is mainly advantageous for the users having no information related to the locations they want to tour. By giving specific geographical based data, the visitors and common people who are relocating to new towns can get a superior guidance of the locations they want to tour. The guide system of the application is based on reading of GPS coordinates. Depending on the internet connection and device accuracy, the smart phone detects the location of the place user is in. This location is cross-referenced against the database of fed locations; when matched, it moves on to the next action. [Ref. 2]

U. Thakur , have proposed Tools such as augmented reality (AR) hold a vast potential in attracting visitors. The rise in smart mobile devices only boosts this further as it becomes possible to have information and tour generation at one's fingertips. In this paper, they have tried to enlist all the limitations and challenges encountered while utilizing the concepts of AR for developing a tour guide system. They have described various state-of-the-art AR applications that provide services having their own set of drawbacks, and we give a brief introduction to our proposed system. AR-based tourism systems are presented in the paper, which include several methods and algorithms that can be used for image comparison required to recognize objects of interest. [Ref. 3]

PROBLEM STATEMENT AND OBJECTIVE

The main aim of this project is to develop a location based app to help the user in finding out the nearby detailed information regarding certain important places linked to their current position. Important places such as hospitals, police station, medical shop, ATMs etc.

The design aims of the project:

1. Use off-the-shelf hardware and software components.
2. Simple and easy to use interface.
3. Simple and easy to build new expos.

The system was required to complete the below mentioned tasks:

1. Display attraction information in the form of Hyper Text Markup Language (HTML) pages relevant to the user's position.
2. Displaying user's position graphically on the tour map, based on their position from a GPS.
3. As the size of the screen is limited it requires the user interface to be simple yet effective.
4. Display relevant information to aid in the navigation process.

The client's current location is one of the most important information for any location related system. Periodically mobile phones need to report their own locations to the remote server, so that the information they want can be suitably queried. From the service point of view, the simplest method of locating is, to let the user tell his or her own location, but this method shall require extra efforts, because the user will then have to define his or her location and input it to the system. Using different positioning systems a user can be located.

Our system is designed for real-time delivery of tourism data to a mobile client, which can also provide location dependent information. The idea behind the system is simple: using personal, mobile wireless computing devices, users can get the tourism guide ubiquitously.

III. PROPOSED SYSTEM

Agile Methodology, for mobile application development.

We are using highly mature software development cycles to provide the users high-quality output on time. It offers tremendous opportunities, light weight development process, and value to build application in short cycles with quality check in every state.



Figure 1: Agile Methodology

Benefits of Agile Methodology:

- Visibility
- Cost Control
- Simple Design
- Personalization
- Ability to adapt changes
- Predictable costs and schedules
- Even late changes in requirements are allowed

IV. FLOW CHART /DATA FLOW DIAGRAM

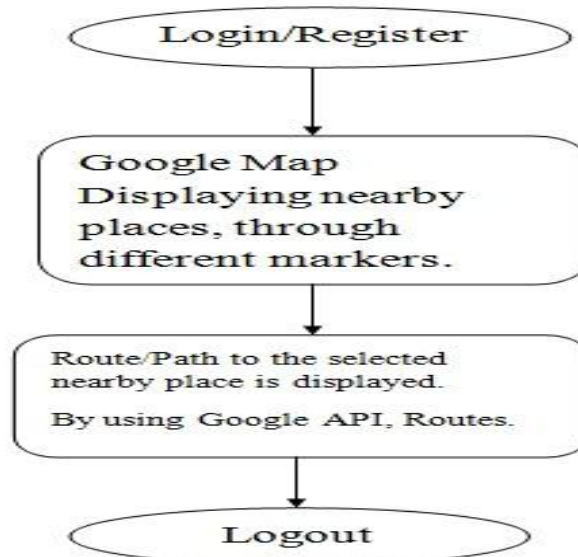


Figure 2: Flowchart of Tour-Pal.

V. CONCLUSION

Tour-Pal is an application that will help its users finding places (such as police station, hospital, etc) that can be necessary in any emergency situation. User might also need to find places like banks, ATMs, medical shops etc if the user is new to that area. Also a user (say, tourist) new to the city may also search for places like nearest hotels, restaurants etc. This application shall prove to be the easiest way of finding out places nearest to user's current location.

Instead of having many different apps (ex: one for nearest hospitals, another for restaurants, etc) this application alone will provide nearby locations of almost all types of places.

VI. FUTURE SCOPE

At present this application will be providing a few essential places to its users. Later in future the following fields might also be added:

1. Petrol pumps.
2. Vehicle repairing garage.
3. Railway Station.
4. Bus/Auto stops.
5. Tourist places, etc.

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