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# INTERNATIONAL JOURNAL FOR ENGINEERING APPLICATIONS AND TECHNOLOGY TRIPALS USING ANDROID APPLICATION

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#### **Abstract**

Tourism industry is one of the most rapidly growing industry in the world. It has a significant contribution to the economy of the nation. Through literature survey, it has been seen that there is a lot of extent of progress right now. This paper presents the tourism recommendation system which is built using the different modules which helps the user in exploring the city. In this project user will get real time information of the particular place using the Google Maps API as well as personalized trips can be planned.

Index Terms: Tourism, Android application, tourist guide, google maps, API.

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#### 1. INTRODUCTION

Tourism industry has seen a tremendous growth in these recent years. Generally, tourists and travellers waste a lot of time planning their trips to achieve maximum satisfaction. It is quite difficult task for the common people travelling first time to a place, amidst the rush of cities. Thus, a smart system is needed which can cope up with these challenges in the new age of smart travelling. In this context, this application aims to spot the major computing requirements to support the development of tourist point of promotion for the traveller, by the means of an easy to use mobile application proposal.

This system essentially helps a traveller new to the town or anyone who wants to explore a city within a selected period of time. The user is supposed to enter his/her interests and preferences while signing up. Once the account has been created, the user can choose the location manually or let the system detect his/her current location as the starting and ending point of the trip. Then, the start and end time of the trip must be specified by the user. Since all the trips of a user will be stored, he/she can also view the previous trips. Tripals, smartly makes its way in analysing users' interests and preferences and therefore the period of time the user is willing to explore an area and designs an itinerary and a

route with the best tourist spots around the selected location such that

he/she returns to the starting location by the specified end time. This makes use of shortest path algorithms for determining the route.

The system makes use of the Google Maps API to get all the places around the selected location with all their information. Then, these locations are sorted based on ratings, distance, and various other constraints to place it before the user

### 2. LITERATURE REVIEW & RELATED WORK

#### **Existing systems**

The previous system still lacks of details; information that might be crucial to be known by the user, which facilitates them to use this transportation.

The number of individuals that intrigued to utilize LRT as their open transportation is as yet unsatisfied.

There is different kind of open transportation accessible at Kuala Lumpur these days. Government had gone through a tremendous measure of cash to give open transportation particularly in LRT advancement and furthermore in advancing open transportation.

#### 2.1 Location based services for tourism

This article review surveys and discusses about the advancement of portable Location-Based Services (LBS) in Tourism. Since the majority of the visitors visiting any odd attractions need to consider different issues, for example, accommodations, cafés and restaurants, tourist place information, etc. Thus, the highlights of mobile LBS can give directly in the time and right in the spot data, services, and suggestions for explorers to use. Subsequently the paper surveys and tests the articles with LBS for the travel industry, and composed this article review as what LBS may be, what the travel industry LBS applications have, what clients experience is from LBS, and what traveller's mentality is about LBS.

#### 2.2 Smart travel guide: application for android mobile

Smart travel guide is an application which presents the architecture and implementation of any geo-location. There is quite rise in number of mobile computing applications which uses location dependent systems. This paper proposes the architecture of mobile tourist guide system for Android Mobile Phones that provides tourism information to the smartphone users efficiently. This system overcomes the drawbacks of mobile devices by taking the advantage of light weighted mash up technology, which can combine more than one data sources to generate value-added services.

#### 2.3City guide over android

The objective of this paper is to investigate how to understand a mobile city guide utilizing the Android platform, including a prototype of the city guide. The project utilizes the exploration technique Design Science. Through structuring and executing an antique (for example model of city guide), the objective of the task is reached. At long last, the project is evaluated on the basis of four aspects including platform evaluation, general functional evaluation, scenario evaluation, and non-functional evaluation. The model executed incorporates fundamental functionalities of city guide such as showing a map, locating points of interest (POIs) on a map, locating location of a user, retrieving information of POIs, add reviews about POIs, plan a tour, support communication (e.g. phone, short message), show route direction to POIs, add reminder, and choose different kinds of POIs to show on map. In addition, this paper also investigates how to incorporate current advancements like Google Calendar, Google Map, Browser, Contact application and Phone application into the project. Also, the project examines the non-functional aspects including extendibility, tailor ability, and ease of use.

### 2.4 Rapid prototyping of a mobile location-based tour guide

Location-based systems are getting progressively famous with the far-reaching accessibility of handheld gadgets with on-board Global Positioning System (GPS) units. Developers are presently racing to make the most recent \_killer app\_ for platforms, for example, Apple's iPhone and

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Google's Android. The vast majority of these applications spin around catching the user's location and afterward introducing context sensitive information. One area where location-based frameworks are as of now underutilized is in the guiding of users through a specific venue. The objective of this paper is to execute a location-based tour guide for the University of Ontario Institute of Technology grounds.

#### 3. ANALYSIS OF PROBLEM

Maps don't navigate properly. For example: Suppose we visit to A.P and we are not aware about language and maps don't navigate properly then we will not be able to reach the destination.

High speed internet requirement. For example: If we are traveling from one place to another, we must require high speed internet on our mobile handset because at low speed internet Google map would not work properly.

Traffic consideration. For example: Google maps must show the route according to traffic. It will be easy to reach our destination in minimum time.

Maps would show the weather. For example: the Google map must show the weather for the desired destination.

Too slow to Load. For example: The Google map shows the larger image due to this it takes time to load.

Infinite Accuracy. For example: Suppose we need to reach to a destination and the road is blocked we will not be able to know about this through Google map.

#### 4. PROPOSED WORK AND OBJECTIVES

The challenge addressed by mobile was capacity to get definite area from the predefined top choices, current area, map, separation between two urban communities, meteorological forecast, discover the video. It is observed from the research that numerous applications have been grown, yet a portion of the traveller data is fundamentally gotten through paper, magazines; these applications don't give precise data while user on move.

The proposed volumes in this project are:

#### 4.1 Registration Module

This will be the first module when the user opens the app for the first time. Here the user will have to fill the details about himself. The data will be saved in the database and will be used to have an id of the user. This module will be skipped if the user is already signed in to the application.

#### 4.2 Review Module

Here the review of the place will be taken from the user. This will be saved in the database and will be used to rate the arrangements.

#### 4.3 Location Module

Here in this module the location of the user will be saved in the database.

#### 4.4 Navigation Driver Module

Navigation is the sliding menu that appears on the android screen with a hamburger menu icon in the action bar.

#### 4.5 Notification Module

Notification system in information technology, a notification system is a combination of software and hardware that provide a means for delivering a message to a set of recipients.

## 5. SYSTEM DESIGN Data Flow of System

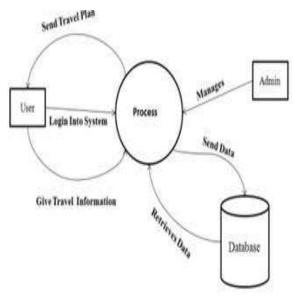


Fig: 1 DFD level 0 of System

Above diagram could be an information flow chart (DFD) that shows a graphical illustration of the "flow" of knowledge of Tripals, the travelling application. A DFD usually represents what sort of information will be inputted to get the specific output, how the data will process throughout the system and where it will be stored. There are basic two systems one for main user/client and second for admin that handles and manages the full system. Admin is the main handler of the system who will add cities and wellliked places of the actual town consistent with a class like gardens, park, etc. The user should initially login to the system then produce one tour plan with timings for a day in particular destination. The system sends and stores all the information given by the user to the database. If the user desires to travel or check his plans he will visit his profile and click on to look at plan. Then the full plan created by a user is shown on Google map together with his current location and navigation for every location the user gave is also offered.

# 6. ADVANTAGES AND DISADVANTAGES Advantages

- This project consists of a login page which allows only the registered user to login and thereby restricting unauthorized access.
- This system can be used to view the location view in map that the user or traveller desires to reach.
- The user can also get the navigation facility i.e. the ways to follow to reach the final destination in map which gives a superior view to the clients.

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- Since the location can be seen in map, the user can even zoom in and zoom out to show a better view.
- The usage of this application greatly reduces the wastage of time to search for a place.
- The application also directs us to make quicker decisions with respect to places to visit.

#### **Disadvantages**

- The android mobile user won't have the option to embed or view details if the server goes down. Thus, there is a confinement of single point failure.
- As compared to normal mobile phones Android operating system uses more amount of battery.
- Requires an active internet connection.

#### 7. CONCLUSION

In this paper we introduced an approach which defeats the disadvantage of existing tourist guide system. This paper fundamentally centre's around the discovering the various traits for the travel industry-based application so we can have the thought regarding what kind of properties should these sorts of applications have. In such applications, location dependent systems have been recognized as a significant application. So, in this paper we show the smart travel guide architecture and we propose structure of Mobile tourist guide system for Android Mobile Phones that can give the tourism data to the mobile users helpfully. This application will help the visitors as well as the city in making it as a smart city. The proposed project works to give a financially suitable, economical and an easy to understand answer for these issues.

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