Development of Tourism Guide System through Android Applications

[1]SABERA KHALEEL, [2]SUMERA ARJUMAN BANU, [3]NOORJAHA, [4]PASHIKANTI RAVALI
Students of B.TECH Final Year
Department of CSE
Balaji Institute of Technology & Science, Warangal, Telangana, India.

ABSTRACT:

They application mainly represents mobile tour guide system with augmented reality. Tourism is travel for pleasure; also, the business process of entertaining tourists, attracting and accommodating and the business of operating tours and travels. Top up reality is nothing but direct or indirect view of the physical environment whose element is changed by computer generated sensory input. They guide tourist with respect to visit, there exist numerous applications. All of them are paper-based and the Mobile based having restrictions of a interactive visualization and accurate navigations. By considering restrictions of above applications, this system application provides a portable tour guide application with increased the information, called "Tour Guide System".The system provides visitors to have more intelligent, instructive and client specific experiences with extended reality by perceiving or following the contents of a visit booklet. The GPS functionality is also available for the tourists to search tourist places. This Paper describes from the features and related to work on different android applications based on augmented reality.

Index Terms: **Smart Phone application, Tourism, Android OS, Internet, Web Application.**

I. \INTRODUCTION:

This article titled as "Travel guide android application for Telangana" is a web application; that will be designed from concept through analysis and specification. This project research and analysis consist of requirements that are divided into sub section in order to gain well supportive of the project work done.

The essential purposes of this article of develop a travel guide system Using Android Application. The Application Software could be worked or utilized on any real Smartphone's that is fit for using Android Platform for a tour guide system.

Main objective is to create an automated system that will be installing in smart phone for users to access details on travel guide Telangana. Android is more suitable for the project because of high number of android users. [1]These are developed that can supports all android OS version, application with less memory space, synchronized system serving dual purpose of mobile and web application and get halaal food restaurant, hotels map and adequate information.

II. LITERATURE REVIEW:

The major problems with the existing system is usability, load and performance, lack of information, alert response and communication bandwidth hamper the research from achieving the main objective of it. These problems are described with risk involve and solution for the problems. Analysis had shown with the smart phone anticipated that will surpass the business of Smartphone within a brief span of time and the general shipment of Smartphone determined to achieve 400 million by 2014, there is no better platform to create the travel guide application other than the Android.

1.1 CHALLENGES OF TOURISM IN TELANGANA DUE TO LACK OF INFORMATION:

The Telangana State was carved-out from the erstwhile Andhra Pradesh and came into existence with effect from 2nd June, 2014. The State emerged as 29th and the youngest State in the Indian Union with a geographical area of 1,12,077 Sq. Kms.[2], (After accounting for the transferred 327 villages from the erstwhile Khammam district to Andhra Pradesh) and is the twelfth largest State in terms of both area and the size of the population in the country. Telangana is located on the Deccan Plateau and lies in the Southern region of India. The State is strategically located in the central stretch of the eastern seaboard of Indian Peninsula. The State is bordered by the States of Maharashtra to the North and North-West and Chhattisgarh to the North, Karnataka to the West, and Andhra Pradesh to the South, East and NorthEast. As per the 2011 Census, total population of the State is about 3.50 crore. The major cities in Telangana State include Hyderabad, Warangal, Mahabubnagar, Karimnagar, Nizamabad, and Khammam.

III. ZONE BASED DIVISION:

For example of Telangana State is divided into four agro-climatic zones based on the geographical characteristics such as rainfall, nature of soils, climate etc., viz., (i) Northern Telangana Zone, (ii) Central Telangana Zone, (iii) Southern Telangana Zone and (iv) High Altitude and Tribal Zone.

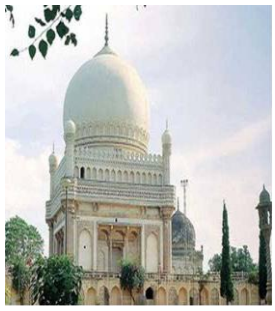
Apart from Hyderabad, cities such as Warangal, Karimnagar and Nizamabad are emerging as Tier-2 for IT and IT-based industries. The State has become an important tourist destination for both domestic and international tourists. Hyderabad has become a business and MICE tourism destination in the world. In order to bring administration closer to the public and to ensure the benefits of development and welfare schemes reach the poorest person in the State more effectively and efficiently, the existing 10 districts are re-organized into31 districts. Apart from the existing 10 districts, i.e., Adilabad, Hyderabad, Karimnagar, Khammam, Mahabubnagar, Nizamabad, Medak, Nalgonda, Rangareddy, and Warangal Urban, 21 new districts were created, which are: BhadradriKothagudem, Jagtial, Jangaon, Jayashankar, JogulambaGadwal, Kamareddy, KumuramBheem, Mahabubabad, Mancherial, Medchal-Malkajgiri, Nagarkurnool, Nirmal, Peddapalli, RajannaSircilla, Sangareddy, Siddipet,Suryapet,Vikarabad,Wanaparthy, YadadriBhuvanagiri, and Warangal Rural. Best efforts have been made to present up to date information/data related to 31 districts in this publication. However, wherever the required information/data is not available for all 31

districts, data relating to erstwhile 10 districts is provided. The Tourist attractions in Telangana include historical places, monuments, forts, waterfalls, forests and temples. Some of them are:

(A)Charminar

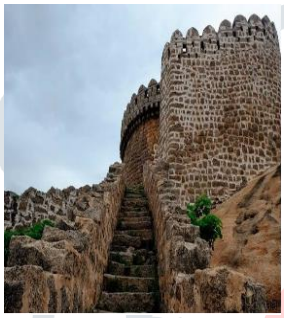
(B)Makkah Masjid

(C)Golconda Fort



(D)Qutub shahi tombs

(E) Kakatiya Kala Thoranam



(F)Bhongir Fort

(G) Paigah Tombs

(H)Kulpakji or Kolanupaka Temple

(I)Yadagiri Gutta

(J)Thousand pillar temple

(K)Bhadrachalam Temple

(L)Ramappa Temple

(M)The Church of South India Cathedral

(N)Kuntala Waterfall

(O)Mallela Theertham

(P)BheemuniPaadam Waterfalls

(Q)Pochera Falls (Near Kuntala Falls)

(R)Gayatri Waterfalls

(S)Sabitham water fall

FIG (A):Charminar:-It is the landmark of Hyderabad which is global icon of hyderabad, listed among the most recognized structures of India. FIG (B):MakkahMasjid:- Makkah Masjid is a listed heritage building in old city of a Hyderabad. Muhammad QuliQutb Shah[3], the fifth ruler of a Qutb Shahi dynasty, commissioned bricks to be made from the soil brought from the Mecca, the holiest site of Islam.FIG (C):Golconda Fort:-Golconda Fort is one of the magnificent fortress complexes in India. Seated on a hill on one side and spiraling fort on the other. FIG (D):Qutb Shahi Tombs :- The Deccan architecture with a large minarets, huge domes, delicate marble designs and multiple inner passages. FIG (E): Kakatiya Kala Thoranam:- It is a historical arch and symbol of the Kakatiya Dynasty in a Warangal district. the main symbol in the Emblem of a Telangana for the state Of Telangana. FIG (F):Bhongir Fort:- It was built in the 10th century on an isolated monolithic rock by the Western Chalukya ruler TribhuvanamallaVikramaditya VI .it has a unique egg-shaped construction with two entry points protected by a huge rocks. The fort is a associated with the rule of queen Rudramadevi and her grandson Prataparudra II.

FIG (G): Paigah Tombs:-This Mosque is one of the marvelous mosques present in the Secunderabad/Hyderabad. The architecture followed in this mosque is Andalusi/Spanish Architecture. The mosque was a constructed by Sir Vicar-ul-Umra a Paigah Nawab in 1906. FIG (H): Kulpakji or Kolanupaka Temple:- A Kulpakji is a 2,000 years old Jain Temple at the village of a Kolanupaka in Nalgonda district. This temple is one of the oldest temple in an south India and considered famous for state of the art architecture and sculptures. FIG (I): Yadagiri Gutta: yadagiri gutta is a popular pilgrimage town in Nalgonda district in the state of Telangana situate close to Warangal highway,yadagiri gutta early knowns as vedagiri because it believed that lord Vishnu kept all the vedas at this sacred , FIG(J): Thousand pillar temple: -It has believed that the Thousand Pillar Temple was built by King Rudra Deva in 1163 AD. There are one thousand pillars in building and the temple, but no pillar obstructs a person in any point of the temple to see the god in a other temple. FIG(K): Bhadrachalam Temple:-The Bhadrachalam Temple is a temple to Lord Rama in the town of a Bhadrachalam in Khammam district. It was situated on the banks of the river Godavari. FIG(L): Ramappa Temple: -An inscription in the temple of dates to the year 1213 and said to have been built by a General Recherla Rudra, during the period of Kakatiya ruler Ganapati Deva. FIG(M): The Church of South India Cathedral :-Originally built by a British Wesleyan Methodists, it was a consecrated on 25 December 1924. The church was a built in under the stewardship of a Methodists Christian, Reverend Charles Walker Posnett, who was driven by the motto My best for my Lord. FIG(N): KuntalaWaterfall:-It was located in Kuntala, Adilabad district, at 45 metres (148 ft), is the biggest in the state. There are other interesting waterfalls in Telangana state. FIG(O): Mallela Theertham:-At distance of a 58 km from Srisailam& 173 km from Hyderabad is a charming waterfall located in the dense Nallamala Forest. This is one of the popular tourist attractions to visit a around Hyderabad. FIG(P): BheemuniPaadamWaterfalls:-The distance of 10 km from Gudur Bus Stand, 51 km from Warangal, 88 km from Khammam Bus Station and 200 km from Hyderabad, BheemuniPaadam Waterfalls is a picturesque waterfall located at a Gudur in Warangal District of Telangana. FIG(Q): Pochera Falls (Near Kuntala Falls):-Pochera Falls is a pretty waterfall on a Kadam River. The falls are located at a distance of 10 km from the Neredikonda village between Nirmal & Adilabad. FIG(R): Gayatri Waterfalls: -The distance of 5 km from Tarnam Khurd Village, 19 km from Kuntala Waterfalls, 38 km from Nirmal, 59 km Adilabad and 270 km from Hyderabad, Gayathri Waterfalls is a beautiful place located in a Adilabad district of Telangana. FIG(S): Sabitham water fall:-In sabetham near godavarikani of 15 km and in ramagundammandal in karimnagar beautiful location with forest of green hills.

IV. TOURISM AND THE SMARTPHONE APPLICATION CAPABILITIES:

4.1 Travel with Smartphone:

Taking into account of computing abilities and smart phone application, the smart phone has quickly been received as a tourism travel instrument. With a developing number of clients and a wide mixture of uses developing, the smart phone is in a broad sense modifying our current utilization and understanding of the transport system and tourism travel[3]. In view of a survey of smart phone applications, this research assesses the current functionalities utilized as a part of the household tourism travel area and highlights of the significant improvements.

4.2 Smart phone Application capabilities:

As the world become networked, and systems have gotten general through the use of smart phones, social practices are experiencing a radical conversion, none more so than in the space of travel. The fast uptake of portable engineering has empowered individuals to arrange their everyday flexibility with expanding smoothness giving extension to abhor choice making on the go focused around organized integration between individuals.

V. THE SMART PHONE APPLICATION AND TOURISM MOBILITY IMPORTANCE:

Telangana figures at the begin of 2011 show 27 per cent of grown-ups own smart phones and there is developing enthusiasm toward mobile Internet access for capacities, for example, long range informal communication (57% of mobile Internet clients), sending/accepting messages (53%) and data look (42%). The business sector is relied upon to develop, particularly as mid-extend and low-end 3 cell phones focus on the mass business. Campbell and Kwan classify smart phone use into three examples: logistical, for instance, authoritative use identified with travel, family unit administration and gatherings; social, for instance, staying in contact with companions; and instructive, for instance, getting to news updates. All of which are appropriate to tourism travel connections.

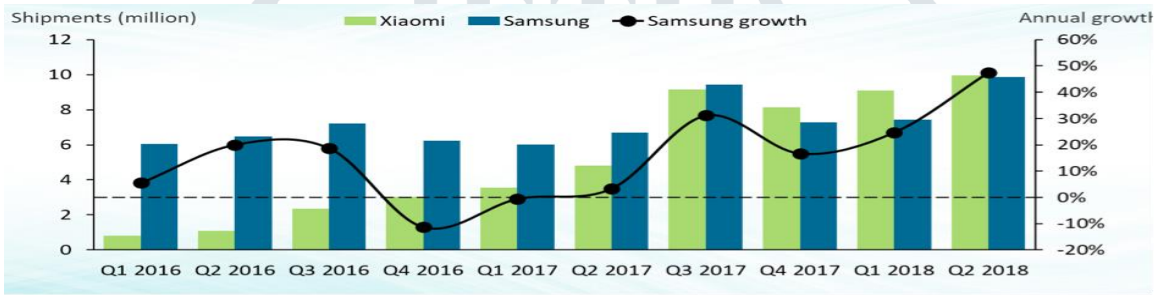


Fig-1 : smart phone usage in telangana

This statistic is presents the social network penetration in India. As the third quarter of 2017, the most popular social network were YouTube and Facebook with an 30 percent penetration rate each. WhatsApp was ranked third with 28 percent reach. India ranks second among countries with the most Facebook users, accounting for 11 percent of global Facebook audiences in April 2017. January 2017 data puts the active social networking penetration in India only 14 percent of the population - one of the lowest rates worldwide[4].

VI. TELANGANA ECONOMIC PROFILE ON TRAVEL AND TOURISM:

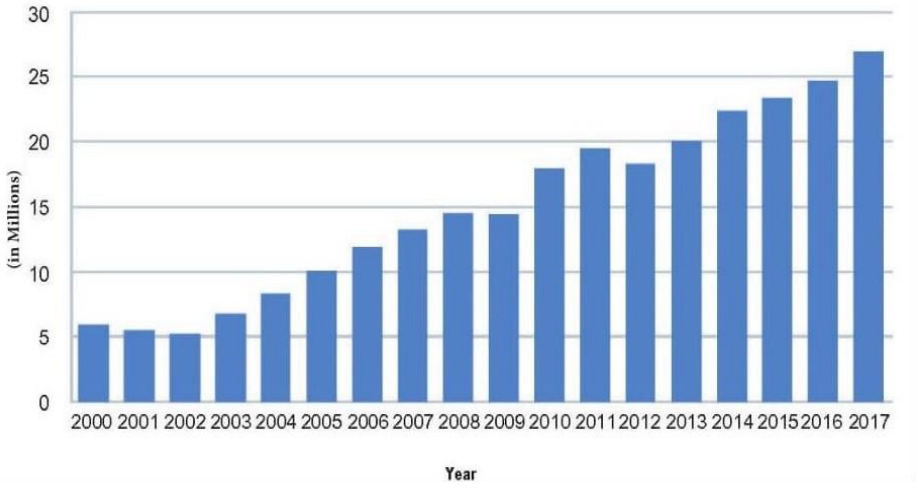


Fig-2: graph for telangana tourism

VII. REVIEW ON RELATED EXISTING SYSTEMS:

7.1 Travel guide India application review:

Travel Guide India offers you finish and avant-garde city guide for different tourist places in India. This application is completely based after giving you the genuine data from different sources," It will direct you through the UNSEEN spots of different state of India[5]," The application will examine some more places that you won't get in any sort of Traveling application. This application will additionally help you to get data about traveling places, religious going by spots and a lot of people more. We have given the area of the going to places, Hotels for lodgings, shopping spots for that range. Some piece of the application use Internet and some don't. So it would be a good guide on the off chance that you want to visit INDIA [6].

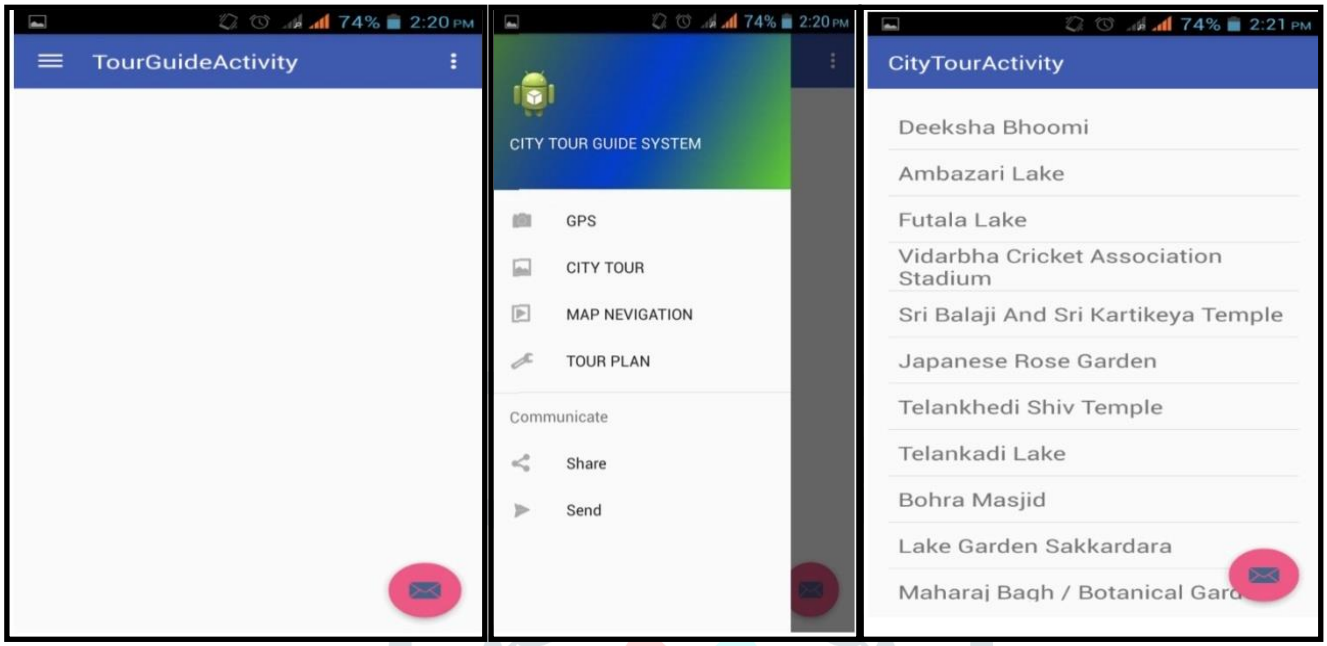


fig3: travel guide India

Features:

Nearby List of tourism places at each state. Domestic and international airport shopping spots and hotels Metro route for Delhi and Kolkata route. Information Calculate distance between each route [7].

7.2 Positioning system application review:

Fig-4: positioning system diagram

System design consideration: We start by plotting the five outline issues that must be considered in positioning system on travel guide application [8].We then continue to examine architectural subtle elements of three practical modules to positioning system, specifically identifying, processing, and storing of the data.

7.3 Design issue:

Before undertaking to an examination of the outline of a RSS-based positioning system in point of interest [9], let us give a review of two key configuration challenges in this application.

VIII. LATEST TREND FOR TRAVEL GUIDE TELANGANA ARCHITECTURE DIAGRAM:

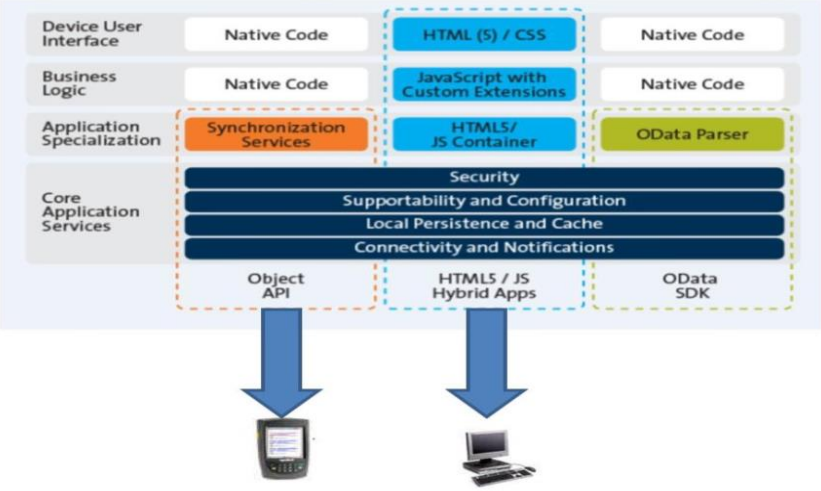


fig-5: proposed system architecture diagram

After reviewing the existing system, the literature review has provides a vital source on the article to accomplish for bringing an additional feature which is not available for the previous existing systems [10]. The system architectural diagram described

how the proposed system will function, the latest trends of this system is serving for two purpose of; one as mobile application and secondly as web application. Therefore they are synchronized to serve the same function.

IX. PROBLEMS WITH ANDROID APPLICATION:

According to describe lack of documentation is a problem related to android, this could be because of the fast improvement and changes of the Android stage, which outpaced its expert and scholastic audits [11]. Thus, creating application for Android is still a challengeable project to most developer, particularly new personnel. An alternate conceivable problem for Android application is the different qualities of the cell phones that are using Android, which can make it hard for clients to use it. Besides, Android being an open source stage, there is an expanding danger of infections and likewise hacking the device accordingly information security may be bargained.

X. SOLUTIONS TO PROBLEM STATEMENTS:

This article has given a suitable solution to problem statements in terms of lack of information. General information is given for visitors to get valid passport, time to visit for particular period session. The entry formalities application and return ticket for the journey, the languages used in Nigeria, health regulation and vaccination against yellow fever[12]. Alert response for emergency call for security response by clicking call us, the reason of this feature is to give tourist the privilege to make contact for any emergency needs. This is to secure tourist life and property by contacting appropriate agent. Upgraded Data access and communication bandwidth to tap the page will reload back the webpage without EXIT since the system is a web application, after network is restore with accessible band-width (5 and 11 Mbps for an IEEE 802.11b wireless) connection from any service provider[13]. Enhancing load and performance is an alternate vital performance thought on smart phone is battery life. Un-use notification icon is to be hiding. Notification icons competencies as of now exist on the iPhone, Android, and Windows Phone stages. Usability is one of the key elements that will genuinely represent the deciding moment client acknowledgment of application. This permits clients to learn rapidly how to utilize another application and rather concentrate on performing the current workload.

XI. CONCLUSION:

This research has meets and satisfied the requirements from the problems statements by enhancing the proposed system performances, provide adequate information for tourist, improve the usability aspect and finally the alert response system. Taken task like this in developing android application involves lots of obstacle and challenges due to rapid growth change technology[14]. Taken into account of this project on travel guide Nigeria, one can become an expert application developer that can stand on the market to earn money.

REFERENCES:

[1] Android City Tour Guide System Based on Web Service Li Liu1, Yan fang Jing2 1Department of Information and Engineering, Shandong Jiao Tong University, Ji Nan, China 2 The School of Computer Science, Liao Cheng University, Liao Cheng China

[2] Smart Travel Guide: Application for Android Mobile Dad ape Jitendra R Jadhav Bhagyashri R Gaidhani Pranav Y Vyavahare

[3] Ahamed, B. B., & Ramkumar, T. (2015). Deduce User Search Progression with Feedback Session. Advances in Systems Science and Applications, 15(4), 366-383.

[4] Ahamed, B., & Ramkumar, T. (2016). Data integration-challenges, techniques and future directions: a comprehensive study. Indian J. Sci. Technol, 9, 1-9..

[5] Jian Meng,Neng Xu ,"A Mobile Tourist Guide System Based on Mashup Technology" ISBN978-1-42447618-3 /10 ©2010_IEEE.

[6] " Research and Development of Mobile Application for Android Platform" Li Ma, Lei Gu &Jin Wang, International Journal of Multimedia and Ubiquitous Engineering, Vol. 9, No. 4(2014)

[7] P.VijayaPrasad, NurulFadzlina, MuradSaadi et al. ,"Shopping Mall Directory: A Detailed Guide Application for Android-Based_Mobile Devices", ARP Journal of Systems and Software, Vol. 3, No.6, pp. 129-135, October 2013.

[8] "Study and reviews of smart city based tourism mobile app" Kanak Divya, International Journal of Computer Trends and Technology (IJCTT) – Volume 3 ,Number 5 - May 2016.

[9] Bhavana Malhotra and Ram Govind Krishnan, "Analysis of Shopping List Apps for Android & iPhone", Theory and Research in__HCI-Symposium,2012.

[10] Punidha, R., avithra K, Swathika R, and Sivaram M, " Preserving DDoS Attacks sing Node Blocking Algorithm." International Journalof Pure and Applied Mathematics, Vol.119, o. 15, 2018, pp 633-640.https://acadpubl.eu/hub/2018-119-15/3/473.pdf.

[11] P.Mate and H. Chavan, ―Android Based Continuous Query Processing in Location Based Services‖, International Journal of Advanced Research in Computer Science and Software Engineering,Vol.4, Issue 5, May 2014

[12] Sivaram,M., & Yuvaraj, D.(2018).Enhancing Vehicle Safety With Drowsiness Detection and collision Avoidance,International Journal of Pure and Applied Mathematics, V118,No.22,PP 921-927.

[13] L. R. Pawar and S.S. Patwardhan, ―Problems & Suggestions for Android City Tour Guide System Based on Web Services for Mumbai‖, International Journal of Advanced Research in Computer Engineering & Technology (IJARCET), Vol- 4 June 2015

[14] I.O.Sari1, L.A.Abdillah, ―Application Location Based Service (LBS) Location Search Palembang Nature-Based Android‖, 5th International Conference on Information Technology and Business Application (ICIBA2016) Palembang, 19-20 January 2016

AUTHOR BIOGRAPHY:

SABERA KHALEEL, pursuing B.TECH final year in the stream of Computer Science and Engineering. Interested in web designing and Database technology.

SUMERA ARJUMAN BANU, pursuing B.TECH final year in the stream of Computer Science and Engineering. Interested in web designing and Database technology.

NOORJAHA, pursuing B.TECH final year in the stream of Computer Science and Engineering. Interested in web designing and Database technology.

PASHIKANTI RAVALI, pursuing B.TECH final year in the stream of Computer Science and Engineering. Interested in web designing and Database technology.