Explore Mumbai Tour Guide: Application For Android Mobile

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Abstract— Tourist needs a brief idea about the destination and how to reach the destination. They have to pay a part of the amount of traveling budget to local guides and agents to get information. A tourist wants to visit maximum places of a city with his budget and limited time. The “Explore Mumbai Tour Guide App” that combines information resources and location-based service category. Many projects have been undertaken on the use of context-aware mobile technologies for tourism that rely on the use of mobile phone devices. The concept of mobile tourism, wherein user access tourist content through mobile application has recently emerged. In accordance with mobile travel guides have to provide context-dependent, multimedia, rich touring services for tourist. Traditional travel guide application contains basic modules such as offline map and tourist journal, hotel bookings. In this project, we are implementing new features with traditional modules to make traveling convenient in today’s modern and fast world. Some features of these applications are available offline so a user will always have access to their information.

Keywords—User Interface, Mobile applications, Offline Maps

I. INTRODUCTION

The world is contracting with the growth of mobile phone technology. As the number of mobile phone users is increasing day by day, facilities are also increasing. Starting with simple regular handsets which were used just for making phone calls, mobile has changed our lives and become part of it. Now they are not just for making calls but they have innumerable Android apps are available in the Google Play store. Mumbai is the biggest city in Maharashtra, there are a number of points for visiting. Hence the number of people visits to different places. Earlier scenario there isn’t any application that would help a tourist to get information about the place they are currently visiting on their mobile phone. Our application Explore Mumbai tour guide system based on web service is aimed to solve this problem.

In this article, we propose software development architecture based on web services. Mumbai is one of the biggest cities in Maharashtra. Explore Mumbai, the capital of Maharashtra, with the Explore Mumbai tour guide app. The app will be a perfect travel companion to get all useful information on the go. It works offline with interactive offline maps. From Juhu beach, Mumbai Chowpatty, Versova beach, Mount Merry church, and Haji Ali to the museums preserving the cultural heritage of the place such as Jehangir art gallery it covers everything! Explore Mumbai travel guide covers the best places to visit and shopping experiences with reviews from around the world. The content is complemented with highly useful interactive maps, photos, history of the places. Covers all aspects of a city guide getting to know Mumbai, how to reach destination, Mumbai hotels, Mumbai restaurants, things to do in Mumbai, places to visit in Mumbai, shopping in Mumbai and experiencing Mumbai nightlife.

Our objective is to utilize an Android mobile phone to extract information about a place, how to reach there. Using web services, the user can query information about the places he is visiting.

II. LITERATURE SURVEY

In “smart travel guide: application for Android Mobile”, Juan-Meng, develop a system which mobile user can get tourism guidance information they need anytime and anywhere. The user can get detailed information like pictures, videos and other guidance information are provided, and so people can better understand the tourist attractions and make decision objectively also they present the working flow of the mobile tourist guide system.

In “location-based tourist guide application”, Todd Simcock present the development of the tourist guide application for the
outdoor environment. The system was designed around the current location by using standard GPS infrastructure. While there have been a number of GPS enhanced travel expo applications (Feiner et al.,1997, Abowd et al.,1997, Cheverst et al.,2000) this project focused on a simple but elegant solution.

In "application for e-Tourism: Intelligent Mobile Tourist Guide", Maksim Schekotov, present the paper that provides the tourist with attraction around based on his/her preferences and the current situation in the region. The authors presented a detailed analysis of related work and classification of mobile tourist guides applications. Implementation of the application has been developed based on the Smart-M3 information sharing platform. For accessing the platform Java KPI library is used.

Prof. Prakash Parmar given us idea about what extra unique features can be added in our project which none of the existing systems does have like trip balance sheet and packing pro to attract more users but also suggested to provide the common travel guide features such as information of places, transportation guide and helpful information in best way possible because implementing common necessary features will always be the primary goal for any tour guide application.

III. PROPOSED METHODOLOGY

A. System Architecture

While building a mobile application architecture is very vital. There are billions of people who use an android phone and also the android app development tool is freely available so we decided to develop an android application. We selected API 15: Android 4.0.3(Ice Cream Sandwich) model by considering its resolution and storage space. Initially, we are keeping our UI as simple as possible because it has been noticed that muddled UI became a major reason behind a mobile applications failure. After understanding the user behavior and their requirement we had chosen the simplest navigation method for our app such as tab controllers and search views as they directly impact user experience.

B. Existing Systems (Applications on Google play store)

- Mumbai travel guide and Maps - This is an application which gives information about popular attractions of Mumbai also the popular places to eat and shop. The main features of this app are complete city coverage, offline content, offline maps, with detailed information about places. This application also helps in hotel booking.
- Mumbai city guide – Mumbai city guide the android app is a complete virtual travel guide. This app provides with detailed information about beaches, waterparks, caves, waterfalls, temple churches and shopping malls.
- Mumbai tourist places – this app will guide travelers to visit the best places in Mumbai for fun food. This app consists of information about places to visit in Mumbai, best places for shopping in Mumbai, best places to watch movies, best places for foodies, best places to chill out.
- Mumbai Maps and Walks – A handy app with several self-guided walks to see the best of Mumbai. Walking tours included in this app are city orientation map, museums and art galleries, Mumbai’s art district, places for worship, Malabar hill walking, Souvenir shopping mall part 1 and part 2.
- Mumbai Places – Mumbai app gives detailed information about malls in Mumbai, beaches, temples, museums and cab info. This app will help to find a list of beaches, temples, picnic spots and much more.

<table>
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<tr>
<th>Existing Mumbai Tour guide Applications on Google Play Store</th>
<th>Developed By</th>
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<tbody>
<tr>
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<td>Happytrips.com – Times internet limited</td>
<td>Complete city coverage</td>
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<tr>
<td>Mumbai city guide</td>
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<td>Mumbai tourist places</td>
<td>KrishMini Apps</td>
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<tr>
<td>Places to visit in Mumbai</td>
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<td>GPS-controlled professionally narrated driving and walking tours</td>
</tr>
<tr>
<td>Mumbai</td>
<td>Silver Touch Technologies Ltd.</td>
<td>Translates phrase of any language into English</td>
</tr>
</tbody>
</table>

Fig. 1. System Diagram [Reference. www.peerbits.com]
**Drawbacks of the existing system**

- All the existing application provides very basic information about tourist places.
- Proper guidance to reach the destination is not given.
- Most of these existing apps are online, they required an internet connection to use the app.
- Almost all of these apps provide the same features they don’t have any secondary unique feature to enhance the quality of the app.

**C. Proposed Systems**

The proposed system is used to improve the application as good and smart product. This proposed system overcomes the entire drawbacks of the existing system. This app provides all necessary and fruitful information about each place incorporated in this app, also focuses on helping the traveler to reach the intended destination. This app has some unique features that are not available in any of the “Mumbai Tour Guide app” which enhances the quality of this app. The following details are explaining the proposed system:

a) Places of interest: This Module will have the list of all the famous tourist places of Mumbai such as Gateway of India and Marine Drive. It will provide all the historical information of each place so that person can easily decide whether this place interest him or not. It will also provide information about the minimum time required to see that place and entry fees if any. The information about the nearest BEST bus stop and railway station will also be given.

b) Mumbai nightlife: Mumbai’s nightlife is one of the many gems in the crown of this city that never sleeps. With lavish, upscale restaurants and bars to spend time. This module will help the user find all the fun activities and adventure that happens in the city during the night such as Mumbai Night tour, street food tour, Mumbai midnight cycling trip.

c) How to reach the destination: This Module will help to find BEST bus to reach the next destination from the nearest bus stop also local train from the nearest railway station. One can also book a cab to reach the destination.

d) Packing Pro: This Module will help the traveler to make a list of things to take with him before visiting any place.

e) Trip Balance sheet: This Module will notify the traveler remaining balance present in their wallet.

f) Helpful Information: This is a very important module of the project which is having three sub-modules in it and they are Emergency contact numbers, safety tips to follow while a person is in Mumbai and Important phrases.

To install “Explore Mumbai Tour Guide” App successfully, the mobile device should fulfill the following minimum requirements:

a) Size of this app is 15 MB, so a mobile device should have appropriate memory in ROM.

b) The mobile device must be enabled with an internet connection to access all the features of this app.

c) The mobile device must be of version Android 4.0.3 or higher.
This is Reach Your Destination Activity. In this Activity contains three buttons for bus, train, taxi. By Clicking on that button will redirect to a particular website for a bus, train, (Uber) which will help a user to reach next destination from the nearest source.

This is Helpful Information Activity. This Activity contains three buttons for Important Numbers, Safety Tips, Useful Phrases.

This is a packing checklist activity. In this Activity contains a floating button (bottom right) which help the user to add a new item to the list. So, this will help the user to make a list of things to take with him before visiting any place. The Important thing about this is user will get notification of remaining items there in a list after a particular time interval which is set by a user.

This is places of interest activity. In this Activity contains a list of all famous places of Mumbai. When a user clicks on any of the places of the list user will get detail information of that place like Historical information along with nearest railway station, bus stop, entry fee if any, explore time, timings, attraction, hotels/restaurants.

IV. ADVANTAGES

- Provides all necessary information about the tourist place, such as historical information, entry fees.
- Guides tourist to reach the intended destination.
- Provides extra features such as trip balance sheet and packing pro (the checklist).
- Most of the features are (almost 85% application) offline.

V. LIMITATIONS

- This app cannot work on iOS and windows operating system enabled mobile devices.
- This app will work for the build version that is Android 4.0.3 or higher and will not work on the lower version device.
VI. CONCLUSION AND FUTURE SCOPE

In this paper, we presented the design and implementation of a mobile application called Explore Mumbai Tour Guide, with which mobile users can get tourism guidance information they need anytime and anywhere. Thus, the Android application being developed will overcome the difficulties faced during traveling and will help the user to remain in contact with other users. The application will constantly provide the user with surrounding details and information, making the journey of the user convenient.

The application provides information about hotels, Mumbai nightlife, helpful information, offline maps which contains safety tips, useful phrases, important numbers. Detailed information of all the places which contains nearest railway station, bus stop, entry fees if any, explore timing, nearest attractions etc.

In the future, this application can easily be implemented in various situations. We can add new features/modules as and when we require. The proposed system could be converted into an offline version. Then this guide will be more helpful for the tourist who does not have access to internet facility. Making it offline will increase its storage but it could be compromised as the tourist will get more benefits.

VII. ACKNOWLEDGMENT

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