

Design and Development of Tour Management System using Android

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Abstract—Tour management android application is an emerging technology in today's world. Cell phones have become a necessary tool for many people throughout the world. This application guides the tourists, offers them with all the relevant information such as images, weather condition and description about the places they want to visit. It is especially useful for the users to visit the places having no idea regarding the place. The users can get a better guidance about the places they want to visit by making use of the Google map service provided in the application. Users can view various tour and travel destinations.

Keywords— *Android; Tour Management; Google Map; Tourist*

I. INTRODUCTION

The increasing use of smart phones and internet technology has encouraged the developers to develop mobile applications. Mobile tourism is gaining popularity from last few years which uses mobile device as a means of travel guide. The tourist needs to search information about the places he wants to visit from his mobile [1]. The travel management system android application which is installed on the tourist's cell phones acts as tour advisors. Even if the tourist can find new places through internet, it is tedious to obtain necessary

information about the places to visit, when the tourist is not familiar with the place [5]. This paper describes about the application which enhances the tourism experience using mobile software technology. Mobile tour management services will assist a developer to develop mobile application to improve travel experience based on real time data values [6]. Without having a classic guide, it will help one to get information of the places to visit, lodges to stay, restaurants to dine, check out the photos and current weather which narrates the location description which they are currently visiting.

In the earlier tourism system, whenever a traveller visits famous destinations, he hires a guide who describes them regarding the places [12]. Tourists are not able to get travel information on time when they are on a trip. The proposed system doesn't require such classic physical guide. The visitor who is not aware about the places can get better guidance before visiting the place. The travel management system android application provides the users with tour guidance information that they need anytime and anywhere [10]. Present generation of mobile devices such as android provide new opportunity to develop real time software applications [8]. The conception of the Android platform is used by programmers more and more in mobile computing fields. The powerful tools and APIs provided by Android SDK are used

for creating applications by using the Java programming language on Android platform. Android provides open system platform, for developing and debugging the applications [2].

The information that the tour management system android application provides help the tourists to find the desired locations. It provides all the details of the desired locations and how to reach those locations. It also provides the basic information to the user to decide the destinations. This paper is useful for the tourists who are unaware about the places they want to visit. The application displays geographic based information to the people shifting to new cities and to the people who are willing to go on a trip. The user may login and view various tour and travel destinations. Then user can select any of the three choices available which includes travelling, food and accommodation facilities. Then the cost is estimated accordingly. It also provides customized packages for the users convenience. The user can make online payment. The user can view the orders placed and thereby provide the feedback regarding their experience and can share the images of the visited places.

II. LITERATURE REVIEW

In the earlier tourism industry, tour and travel information is obtained mainly through communication media like newspaper, magazines etc. [10]. But the tourists on travel do not get the necessary travel information on time. While today's mobile devices are becoming more intelligent, which provides information in mobile itself. Mobile Technology is now set to improve tourism in various fields. Due to busy schedule people want quick and easy ways to obtain information of all kinds and tourism is no different. The tour management system which is based on internet provides self guidance for tourists in mobile phones [7]. This proposed paper presents travel guidance that draws out a number of methods for designing tourist management system.

The smart phone or a tablet is portable and always in the pocket for anytime use. The combination of tourism and technology makes the business towards the development of mobile applications, to provide services to the customers

efficiently. The travel management system makes it possible for the users to plan their trips, make reservations and make other required arrangements for their trips. This would provide them with more time to enjoy their vacation.

The increasing growth of tourism industry has a good scope in today's world. This industry is posing greater competition in the business oriented world. Since this is a technology oriented world, our priorities for tours and travel are keeps on changing. In earlier days people used to go to travel consultancies for tour travel destinations and other travel related information. Now there is tremendous changes in earlier and current tourism. The travellers make excess use of internet to collect the information about the various destinations and offers. For the effective management of tourism quality, the complex information technologies are used by travel industry. The products, information and services should be of higher quality for the consumers satisfaction. The user actually look for is the value for their money. The tourism business makes use of internet for effective operation.

III. APPLICATION ARCHITECTURE

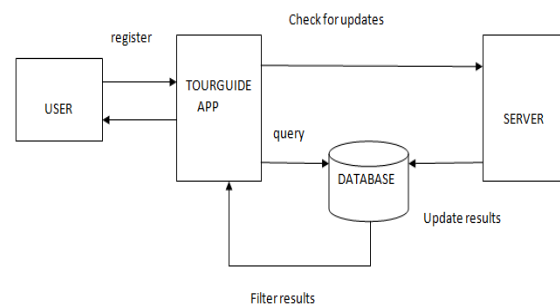


Fig 1: The Proposed Architecture

The three layers of architectural design are presentation layer business layer and access layer.

1) Presentation layer:

The front end of the system is in the presentation layer. Interaction of the presentation layer with the user transforms all the activities that the user performs into requests which is then passed to next layer called business layer. When response is received from access layer the results are displayed in a way that is appropriate to the user.

2) Business layer:

All the calculations and operations in the system are performed by the logic, which is present in this layer. The operations are performed on the data, which is received from the previous layer i.e. Presentation layer. Then the results are stored in the database which is present in the access layer. This layer doesn't perform data storage and display mechanism.

3) Access layer:

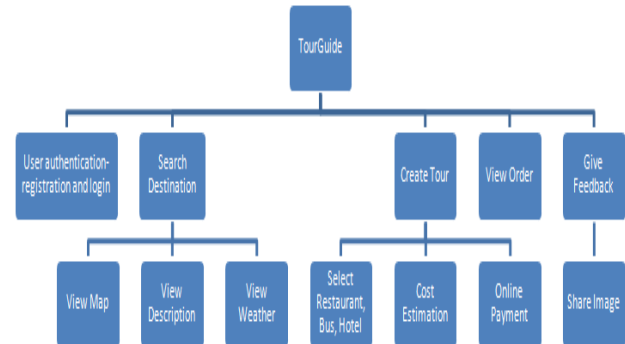
The data is stored to and retrieved from the database which is present in this layer.

IV. PROPOSED SYSTEM

Tour management system first requires the new user or the tourist to register and if the user has already registered they may login into their account. Once the user logs in successfully, they can search for the desired places by entering the name of the place. After the search operation completes, the user gets the image and description of the selected places. The caching of all the information about the places is made for the quick access by tourists without using the external sources [3]. The user can also view the map of the selected place for better guidance [11]. The application provides weather forecasting facilities to the user. There is an option for creating tour and the user can select any of the three facilities available such as travelling, food and lodging. The minimum distance between the current location of user and the target destination is measured using GPS module [7]. Based on the users selection cost is estimated for the individual facilities. Total cost is then calculated by summation of individual costs. The users can also select the individual facilities. It also provides customised packages, based on the cost and number of days. Before selecting the package user can view the predefined list of dates, places and hotels[9]. The users can then view the orders placed and pay online. The user will get the notification about the ongoing activity and the current time when he reaches the entered destination [6]. They can also provide the feedback regarding their experience. The feedback provided by each user is visible to everyone, so that the other users can plan for a better trip. The users after visiting the desired locations, can upload the pictures which can be

viewed by other users. The uploaded pictures can be liked, disliked or commented by other users [4].

V. METHODOLOGY



Tour Management Application has five modules namely:

- User Authentication – The user who has no account must first register to create an account. The user who already has an account logs in.
- Search Destination- The user after logging in searches the location he wants to visit. This has three sub modules namely:
 - ✓ View map-The user views the map of desired location.
 - ✓ View description-The user views the description of the desired location.
 - ✓ View weather- The user can view the weather condition of the selected place.
- Create Tour-The user can plan a tour by selecting any of the options like travel, hotels and restaurants. The cost is then estimated based on the selection and payment is done online.
- View Order-The orders placed by the users can be viewed by them.
- Give Feedback-The user can give feedback about the application.
 - ✓ Share image- The user can upload the image of the visited place and share tour experience.

VI. RESULTS AND CONCLUSION

Tour management system makes life of tourists easier by arranging almost all requirements that they need when they go on a trip. This application provides tourists with description, image, weather condition, maps of the places which guides tourist. It provides best hotels to stay, restaurants to dine and travelling facility. It provides distance between current and target location. The features like customised package selection, cost estimation, online payment, view chosen order is provided. User is notified when he reaches the selected location. The user can upload the image of visited places, share travel experience and can give feedback.

VII. CONCLUSION

Here we have presented the design of a tour management system for android applications which can provide the users with the required tourism guidance needed anytime and anywhere. This application is a combination of smart phone and Internet services. The tour management android application provides a good way for the users to plan their trips, since it provides the detailed information about the tourist places including description, image and map. The system includes different features/services such as providing customized package, distance between the current and target location, Google map, online ticket booking etc. The system achieves its main goal by applying real time data.

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