Atithi Devo Bhava- A Mobile Application on Tourism

Aminesh Deshmukh[1], Siddhant Jaiswal[2], Karthika Nair[3], Prof. Nileema Pathak[4]

[1,2,3]Dept. of Information Technology, Atharva College of Engineering, Mumbai.
[4]Assistant Professor, Dept. of Information Technology, Atharva College of Engineering, Mumbai.

---***---

Abstract - *The exquisite and vivid culture, heritage, traditions of India, attracts people from all around the globe, this makes tourism a fast-growing industry opening various economic and social welfare. The hike in tourism in the age of technology has made travel apps essential for most of the tourists and travelers. The objective of our project is to facilitate a one-stop solution to make the trip hassle free for users. This app incorporates web scrapping to help users get information for the query asked to the chatbot and to display nearby locales based on user's current location. Additionally, the app consists of an ecommerce platform to endorse and sell homegrown products which will help in the growth of the local markets.*

Key Words: **Tourism, Culture, Heritage, One-Stop Solution, Web Scrapping, Ecommerce, Homegrown.**

1. INTRODUCTION

India is a heavenly sanctuary of cultural exuberance, diversity of terrain and wonderful sights. From Kashmir to Kanyakumari Indian diversity is limitless. The Indian peninsula is surrounded by the Bay of Bengal to the southeast, Arabian Sea to southwest and the Indian Ocean to the South, the northern frontiers are defined by the massive Himalayas setting India Apart from the rest of the Asian countries. The abundance of mountain ranges, exhilarating national parks, enchanting rivers, beautiful beaches, silent valleys, majestic waterfalls, historical monuments, holy temples which contributes to tourism of this country.

Tourism is essential for the country's economy and cultural development. The World Travel and Tourism Council calculated that tourism generated ₹16.91 lakh crore or 9.2% of India's GDP in 2018 and supported 42.674 million jobs, 8.1% of its total employment [1]. The sector is predicted to grow at an annual rate of 6.9% to ₹42.05 lakh crore by 2028 (9.9% of GDP) [2]. It encourages national integration, inter-regional relationship, cultural pursuits and provides support to local handicrafts. More than 87 million people are directly employed in the tourism industry as of 2019 and many more are indirectly connected to the industry. Our project's goal is to provide the tourist with app having user friendly features that will help them in experiencing hassle free trip.

The app has an admirable User Interface design consisting of Login/Sign up, home page, browse destinations, chatbot interfaces. On logging into the app, the nearby tourist destinations are directly loaded based on the user location,

which can also be set manually. The chatbot of our app is built based on the process web scarping. The responses to the queries are delivered with great accuracy by web data extraction. This is done by web crawlers by eliminating unwanted details and providing the response to the query. Another feature of our app is that user can add the tourist destinations to the favourites section which they intend to visit sometime. The app also consists of an ecommerce platform endorsing local products of our country which will in turn boost the local markets. Ecommerce platform assists the user to find the relevant products by means of product recommendation techniques based on the current location of the user and on the most viewed merchandise.

As India is known as the land of festivals, the app consists of an event management page which incorporates details of all the festivals celebrated in India. Many temples and festival organizers provide reservation service for faster and finer experience for the people to attend religious services held in a temple or different places organized by festival organizers. With the help of this app the user can register for multiple events held in Indian. For secure payment, the payment application follows PA-DSS to maintain isolation and security of every transaction.

2. Problem Statement

Tourism is an upcoming and fast growing industry in developing countries like India. India is a developing country and due to its newness in nature, there are some hurdles that the tourists face. There are lots of problems and difficulties faced by tourists during their tour due to poor facilities, uncertainties, cleanliness, safety, etc. This will affect the national economy and the growth of this industry. In our country many people plan for their tour as a regular affair may be once in a year. Tourists have to search for tourist locations again and again which becomes annoying. Also, there are highly paid premium packages to access the application services and the tourists may have to hire a guide which may add to their unwanted expense. In this growing field, it is highly important to study the major issues faced by tourists and to take necessary steps to reduce such problems.

3. Need and Motivation

Nowadays problems with existing system is that there is Less number of tourist places displayed in India, Expensive Premium Packages, No chat bot, less number of services, Not

an Indian enterprise. Coupled with the above mentioned reasons the urge to provide users ease of use and a well blown tourist experience with the help of our virtual guide app contributes to the making of this application. Tourists hope to experience various cultures, festivals and meet new people over the world because of the curiosity. It is the primary motivation of all visitors. Travelling can provide peace of mind, improves social and communication skills, excitement or social interaction. The weighty reasons of travelling are freedom, create memories for lifetime and entertainment which can be defined as pleasure travel. In this restless 9-5 world, tourists believe that going on a vacation can bring some calmness in their life.

Tourism is becoming an industry of importance for any country. Like entertainment, it is but a soft power tool that any country could use to show off its heritage in the form of culture and nature etc. and gain economic benefits by doing the same [3]. India as a country is rich in diversity, both natural and anthropological. There in comes the importance of tourism in India. With the opportunity of exploiting all that makes it a colorful sparrow, be it the meadows of Kashmir or the Stupas of Sanchi or the shore temples of Mahabalipuram or the rolling mountains of Meghalaya; we hold the exploitable source of income and employment in the form of tourism. It goes without saying that the world lives in its own perception of India, which to a great extent does not justify the true picture. By opening up the gates for tourism, we do away with our part of expressing our true selves.

4. Methodology

4.1 Registration

The very first process for a new user is to register and create a new profile in the app. This will help users to access various services in the app and help to store their data safely. After successfully registering into the app, the user can enjoy the services provided and can edit and log in into his profile whenever and wherever he needs.

4.2 Access to Tourism UI

After the registration process, the app is ready to use for the users. The app will highlight only Indian tourist locations which may help to attract tourist towards India. Beautiful UI with multiple services is the best way to display sights, cultural exuberance, and diversity of terrain of India. The app consists of various tourist destination with some information about the location. The user can add tourist destinations to the favourites section which they intend to visit. The user can add the tourist destinations to the favourites section which they intend to visit sometime.

4.3 Chat-Bot as a Virtual Guide

Overcoming language barriers is a necessity for the tourism industry. Owing to the large count of languages in the world, it is very likely that the tourist's language differs from the language of the host. In order to accommodate to the needs of tourists we have created a chatbot that could reply to the user queries in multiple languages (currently only English) and also could reduce unwanted expenses of the user.
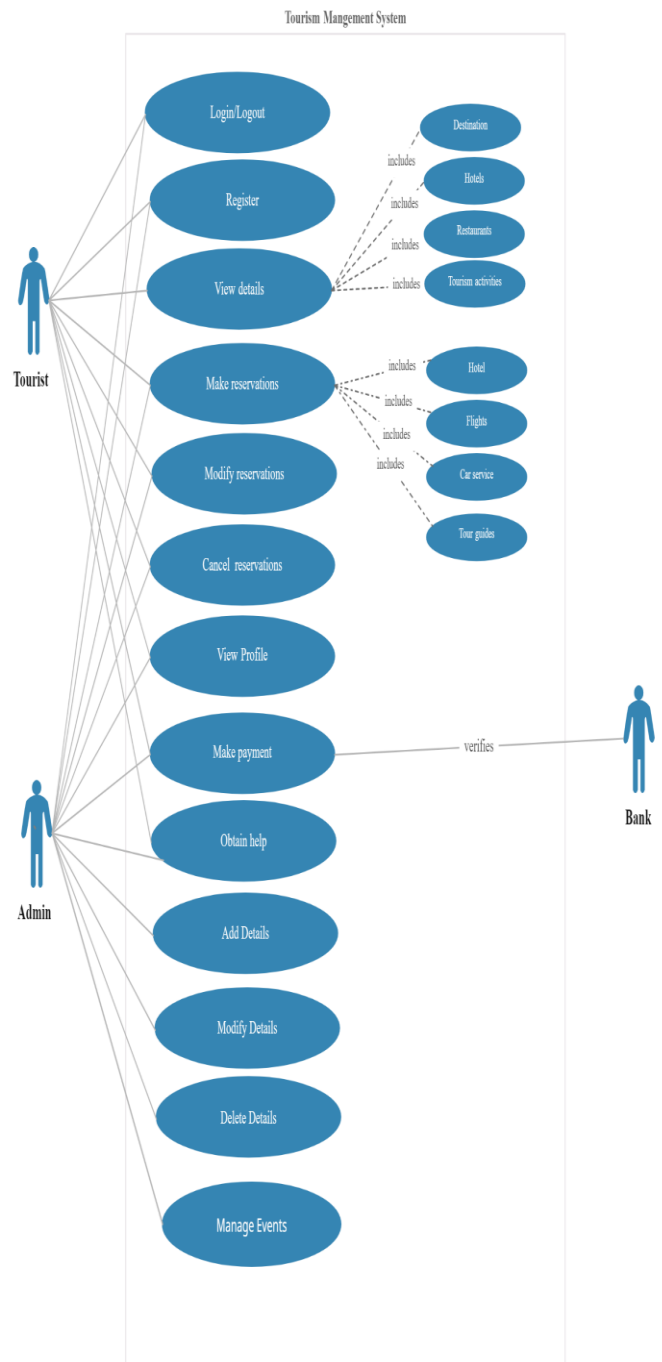

Fig-1: UML Use Case Diagram

4.4 E-commerce

User can easily buy local products on our e-commerce platform by simply searching for the product they need. This could help to promote and spread local culture and products. Ecommerce platform assists the user to find the relevant products by means of product recommendation techniques based on the current location of the user and on the most viewed products.

4.5 Payment Gateway

By successfully adding products into the cart, the user can checkout and pay via Mobile wallet, net banking, debit or credit card or UPI payment under complete security. For secure payment, the payment application follows PA-DSS to maintain isolation and security of every transaction

4.6 Event Management

India is also called as "The land of festivals", different states have different festivals and many events are organized during the festival season. User can simply register for those events from anywhere in the world. The event list will be updated regularly and this could help to spread the traditional, rich, vibrant and colorful culture of India.

4.7 Help and Support

A 24/7 help and support system will be available for the users. Users can call or email their queries to our website. Also, the chat bot could answer to some of the basic questions that the user immediately wants to know. One tap helpline numbers are also available in case of any emergency.

5. Result and Discussion

India is a great country with a haven of tourism delights like wealth of sights, cultural exuberance, and diversity of terrain. Also, tourism in India is important for the country's economy and is growing rapidly. So, we have created a mobile application completely based on Indian tourism for tourists that has a high efficient chatbot which acts as a virtual travel agent and who is able to share the suggestions based on the users travel preferences. The app displays many Indian tourist locations developed using beautiful UI which will attract tourists from all over the world. The chat-bot was developed using web scrapping and was designed using dart programming language and Flutter UI. The chat bot cuts surely down the unwanted expenses of the user in a foreign country. Also, we have created an e-commerce platform to sell and promote local and cultural products. An event management system is developed to spread and promote different cultural festival organized in India.

6. Conclusion and Future Scope

Concentrating on the Indian Tourism we have created an application which is compatible with both, Android and iOS operating system. The app displays many Indian tourist locations developed using beautiful UI which will attract tourists from all over the world. We have made buying local and traditional products easier through the e-commerce platform. Different festivals and events, now can easily be searched in the event management page. The chat-bot is capable in solving   all the queries asked by the user. Tourists can simply register for festival or religious events from anywhere in the world.

Adding to these services provided in the app, in future we can add tour management system, autogenerated itinerary as per user destinations, suggestion system to provide necessary information about the things required while travelling in different part of the country. We can also develop travel tags which will be useful to track location of all the group members while travelling. Also, we can incorporate the new trending technology, Virtual Reality (VR) in our app to develop Virtual Tourism.

ACKNOWLEDGEMENT

REFERENCES

[1] ANNUAL RESEARCH: KEY HIGHLIGHTS (2019) [Online]. Available: https://web.archive.org/web/20191230065707/https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2019/india2019.pdf

[2] Travel & Tourism Economic Impact 2018 India (2018) [Online]. Available: https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2018/india2018.pdf

[3] What is the need of tourism in India? [Online]. Available: https://www.quora.com/What-is-the-need-of-tourism-in-India

[4] Suresh M, Kiranmoy Bid, Sangeetha Gunasekar, "Inbound International Tourism Development in India", in 2015 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC)

[5] Sreekumar Unni, Sangeetha Gunasekar, Deepak Gupta, "Impact of Self concepts & Person concepts on the travel frequency of an Indian Tourist", in International Conference on Communication and Signal Processing, April 6-8, 2016, India.

[6] Harina B, Ashmitha K, Deepan Raj K R, Janani S R, "Virtual Tourist Guide", in International Research Journal of Engineering and Technology (IRJET), March 2021.

[7] X.A. Rodriguez, F.M.Roget, and E.Pawlowska, "Academic tourism demand in Galicia, Spain," Tourism Management,vol. 33, pp. 1583- 1590, 2012.

[8] Shakra Mehak, Rabia Zafar, Sharaz Aslam, Sohail Masood Bhatti, "Exploiting Filtering approach with Web Scrapping for Smart Online Shopping", in 2019 International Conference on Computing, Mathematics and Engineering Technologies – iCoMET 2019.

[9] Yadong Huang, Yueting Chai, Yi Liu, Jianping Shen, "Architecture of Next-Generation E-Commerce Platform", Tsinghua Science and Technology, pp18–29, Volume 24, Number 1, February 2019

[10] Qinglie Wu, Jing Ma, Zhong Wu, "Consumer-Driven E-commerce: A Study on C2B applications", in 2020 International Conference on E-Commerce and Internet Technology (ECIT).