DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMKUR-572103

MINI PROJECT SYNOPSIS 2020-21

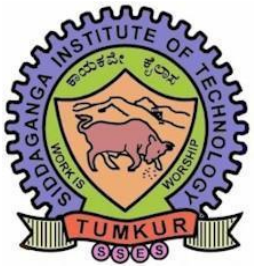
"Mobile Travel Tutor"

1. **Suhas K T (1SI18CS116)**
2. **T R Rajath Jain (1SI18CS123)**
3. **Yashas B V (1SI18CS137)**

Under the guidance of

Dr. Sumalatha Aradhya Ph.D.

Assistant Professor



Department of Computer Science and Engineering

Siddaganga Institute of Technology, Tumakuru – 572103

(An Autonomous Institution, Affiliated to VTU, Belagavi & Recognized by AICTE, New Delhi)

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Introduction:

One of the main units of the service sector of many regions and nations is Tourism Industry.[3] The *Manila Declaration on World Tourism of 1980* recognized its importance as "an activity essential to the life of nations because of its direct effects on the social, cultural, educational, and economic sectors of national societies, and on their international relations."

Tourism brings large amounts of income into a local economy in the form of payment for goods and services needed by tourists, accounting as of 2011 for 30% of the world's trade in services, and, as an invisible export, for 6% of overall exports of goods and services. It also generates opportunities for employment in the service sector of the economy associated with tourism [3].

The main purpose of this application is to guide the users by providing information about the tourist attractions in Karnataka, the climate and the best time to visit. It gives insights such as distance, images, videos etc. It also assists the users in planning their travels accordingly, thereby easing the burden on the users. It also includes a unique feature where it provides personal assistance for premium users.

Objectives:

- To provide detailed information about specific locations that the user wants to visit and also recommend best locations based on feedbacks from other users and their own interests.
- To specify the modes of travel available, routes to the destination.
- To notify users with important and relevant information through instant messaging.
- To assist the users in-person by tagging them with local tourist guides.
- To Integrate many useful features such as maps, weather forecast and client-server interaction.
- To view more user-friendly graphical interface with addition of attractive animations.
- To develop this application for real-time usage and to deploy at Play Store.

Motivation:

Firstly, it is a matter and pride and privilege to showcase the history, culture and heritage of Karnataka. The state of Karnataka is one of the prominent tourism hubs in India. It is very rich in heritage and cultures amid diversities. Secondly, tourism boosts the income of a country. Hence, it indirectly paves a way for economic growth of that country. Moreover, this application is expected to make everything easy for the user to operate, thereby helping the tourists all over the world to explore most magnificent places in Karnataka. Auxiliary reasons include exploring advanced software technologies, learning new programming language and contributing for 'Digital India', a campaign launched by Government of India to make the country digitally empowered in the field of technology.

Literature Survey:

When we look at the trend, people using the mobile applications as a guidance for travels has been increasing drastically.[7] The latest survey shows that Indian travelers decide on the go and are well in tune with the latest technology. While mobiles and laptops continue to be the preferred medium of booking, there is a steep decline in demand for travel agents. The mobile applications provide more features compared to mobile web pages.[6] According to Travelport Digital Mobile Travel Trends Survey (2018), 80% of travelers use a smartphone app to research a trip. According to Travelport Digital Mobile Travel Trends Survey (2019), 92% of travel brands said that having a mobile strategy is 'critical' or 'very important' to the future success of their organization. The literature on traveler information needs and use of mobile applications and devices are scattered and fragmented.[4] However, some of the research on information sources in the planning stage is also useful. In the planning stage some of the information search relates the choice of destination, how to get there and accommodation. Fodness & Murray (1997) state that: "Leisure tourists differ in their information search behavior such that homogenous groups can be formed on the direction of their search, defined by the specific source(s) used.".

[1] According to the paper, Smart Travel Guide (2012), "the location independent systems have been detected as an important part. This system takes the advantage of light weighted mash up technology that can combine more than one data sources to create value added services".[2] With the development of 3G networks and the tourism industry, enriched

travel information is provided on the Internet. However, a problem is shown that, tourists find it very much difficult to get travel information timely and efficiently, when they are away from PCs.[5] Although the planning behavior among travelers vary, this is highly relevant for mobile travel guide applications. A traveler who makes detailed plans has a lesser need for information compared to travelers who do only some planning or almost no planning at all, regarding what to do while they are at the destination. Brown & Chalmers (2003) write that "tourists deliberately make plans that are not highly structured and specific, so that they can take advantage of changing circumstances."

Methodology:

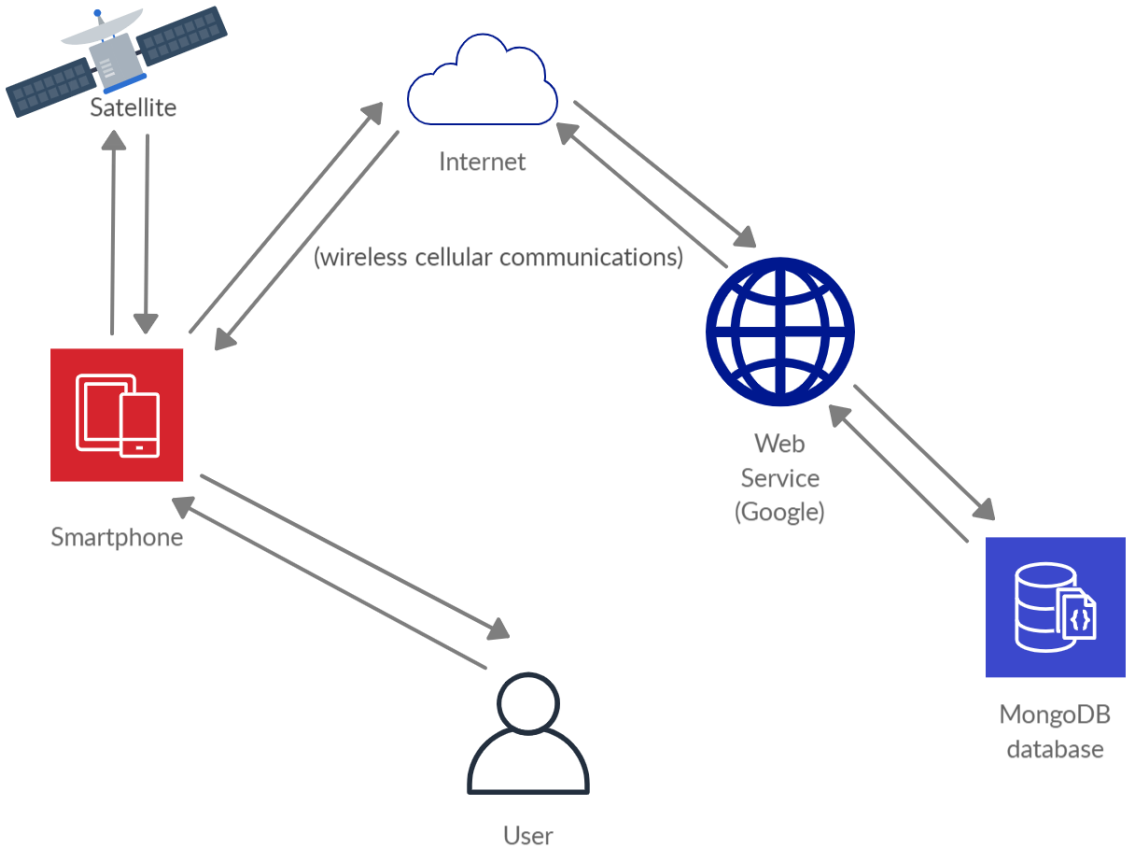

Figure 1: System Architecture Diagram

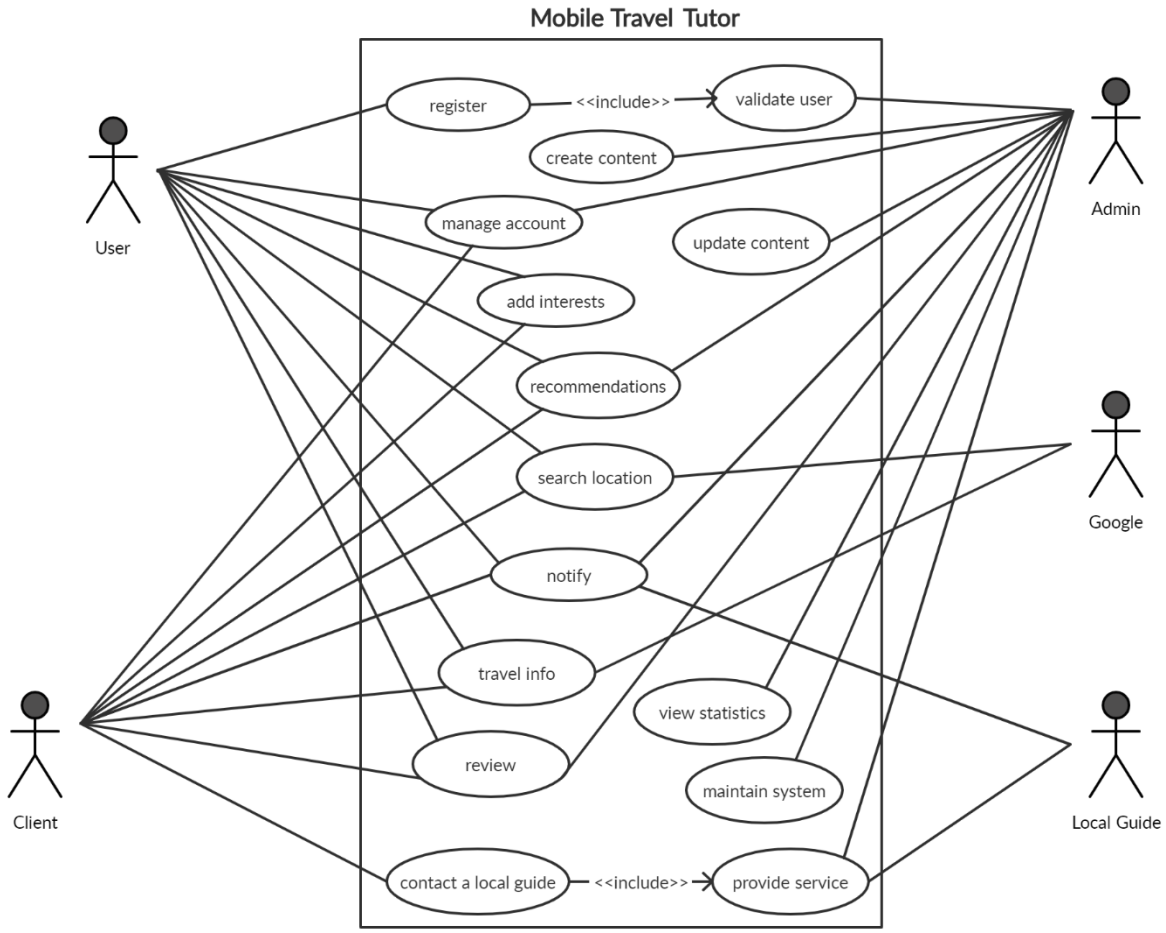

Figure 2: Use Case Diagram

Tools and Technologies:

Software required for implementation:

1. Dart as a programming language
2. Flutter as a software development kit (SDK)
3. Geofencing as a location trigger
4. MongoDB as a database management system
5. Android Studio as an integrated development environment (IDE)

Expected Outcomes:

1. Must be efficient to give all required details that the user looks for.
2. Give recommendations based on the interests of the user.
3. Most beneficial for new visitors in state.
4. Able to show accurate latitude and longitude of the user.
5. Help the user to find a local tourist guide for more convenience.
6. Users will be able to use the application without any hassles.

Conclusion:

Considering the needs and interests of the people, keeping in mind, the current trend in the field of travel and tourism, we have chosen this concept as our subject for the mini project. This application is expected to meet the practical needs and address real-time issues. This system will also be comprehensive and intelligent as well. We also try to bring in, new and unique features and make this more commercial. This application is reckoned to correct the loopholes in the already existing systems. Since, this is an android software development, the users will be able the utilize the service more efficiently. Furthermore, this service can be availed anytime and anywhere.

References:

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[2] Jian Meng, Neng Xu, “A Mobile Tourist Guide System Based on Mashup Technology” ISBN978-1-4244- 7618-3 /10 ©2010 IEEE.

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[5] Brown B. and M. Chalmers: Tourism and Mobile Technology. In Proceedings of ECSCW ’03. Helsinki, Finland, 2003.

[6] ‘Mobile Travel Trends’, an expert-led report by Travelport Digital, 2019.

[7] Article in ‘The Hindu Business Line’ newspaper based on survey by Press Trust of India, published on April 27, 2016.