JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY, NOIDA

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING AND INFORMATION TECHNOLOGY



Project Title: GHUMAKKAD

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Chapter 1: Introduction

Ghumakkad stands at the forefront of revolutionizing travel planning in India with its innovative mobile application. In a landscape marked by fragmented tourism information, Ghumakkad offers a centralized, user-friendly platform dedicated to promoting responsible tourism practices and enhancing visitor experiences across the diverse destinations of the country.

With Ghumakkad, travelers are equipped with a comprehensive toolkit to navigate India's rich tapestry of attractions, landmarks, historical sites, and cultural events. The platform's detailed guides provide insights into major cities and tourist hotspots, empowering users to delve into the heart of each destination.

One of Ghumakkad's standout features is its 'Connecting Locals through Ghumakkad Blog' section, which celebrates the vibrant culinary landscape of India. From popular dishes to hidden street food gems and curated restaurant listings, adventurous foodies can tantalize their taste buds with a diverse array of flavors.

User-generated reviews and ratings offer invaluable insights, allowing travelers to make informed decisions and discover hidden gems off the beaten path. With intuitive search and filter options, users can tailor their exploration based on location, type, or popularity, ensuring personalized experiences aligned with their interests.

Ghumakkad's commitment to seamless support is exemplified by its 24/7 chatbot, offering quick responses and personalized assistance for all travel inquiries. By offering a comprehensive and accessible platform, Ghumakkad contributes to the growth and sustainability of India's tourism industry while enriching the travel experiences of visitors.

Whether embarking on a cultural journey, culinary adventure, or historical exploration, Ghumakkad ensures that every trip through India is memorable, immersive, and hassle-free. With Ghumakkad, travelers are not just tourists—they are explorers, adventurers, and seekers of authentic experiences in the diverse tapestry of India's landscapes and cultures

3.1 Problem Statement

Despite, India's rich cultural heritage and diverse tourist attractions, there exists a lack of comprehensive and accessible digital platforms to effectively promote tourism, enhance visitor experiences, and foster responsible travel practices. Current methods of disseminating information about tourist destinations and facilitating trip planning are fragmented, leading to inefficiencies, limited engagement, and missed opportunities to showcase India's tourism potential. There is a pressing need for a centralized, user-friendly mobile application that addresses these challenges by providing up-to-date information, knowing local delicacies, landmarks, and cultural events, promoting responsible tourism practices, and enhancing the overall visitor experience, thereby contributing to the growth and sustainability of India's tourism industry.

3.2 Model

The application has the following main pages –:

Home Page:

- 1. **Search through various Categories-**Our app enables users to search for diverse destinations categorized by Heritage, Adventure, Spiritual significance, and major tourist spots.
- 2. **Most Searched Query Results** -Our app displays frequently searched queries sourced from platforms like Incredible India, TripAdvisor, and Yatra, providing detailed solutions through data scraping. Users access accurate information conveniently, enhancing their travel experiences with comprehensive insights.
- 3. **Search-filter feature**: Our user-friendly search-filter feature facilitates seamless location searches for specific states, union territories, and popular destinations.

Ghumakkad-Bot-Our feature offers users instant insights and assistance, efficiently retrieving information with a single click or prompt.

Map Page-Our app utilizes the user's current location to seamlessly integrate with Google Maps, providing the distance and optimal route to any searched or received destination.

Ghumakkad-Blogs: Our app facilitates local connections, allowing users to share their favorite spots for exploration.

3.3 Software Requirements

- 1. Operating System: Windows, MacOs, Linux
- 2. Code Editor: Visual Studio Code or any preferred code editor.
- 3. Virtual Emulator or Physical Device
- 4. Installations:
 - Android Studio: For Application development.
 - Flutter SDK: To use Flutter SDK for cross-platform mobile application development.
 - Dart: Programming language used in Flutter SDK for the development.
- 5. Firebase: using Firebase for Authentication and Database
- 6. Flutter Dependencies:
 - image_picker: ^1.0.4
 - kommunicate flutter: ^1.8.6
 - google sign in: ^6.1.4
 - firebase auth: ^4.7.2
 - google_maps_flutter: ^2.5.3
 - location: ^5.0.3
 - http: \^0.13.0
 - cloud firestore: ^4.13.1

3.4 Hardware Requirements

- 1. Development Machine: A modern computer with sufficient RAM and processing power for efficient development.
- 2. Network Infrastructure: Ensure a reliable internet connection, especially during development and deployment.

Chapter 4: Detailed Design

4.1 ER Diagram: It explains the Backend of the Project which uses MongoDb and Firebase.

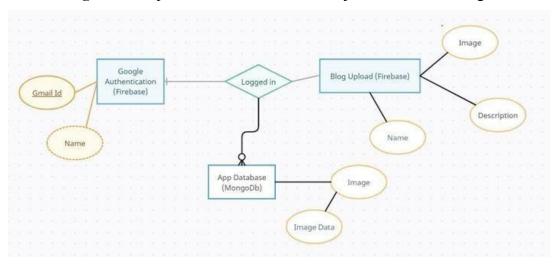


Fig 4.1

4.2 Workflow Diagram: It explains the workflow and navigation through the app

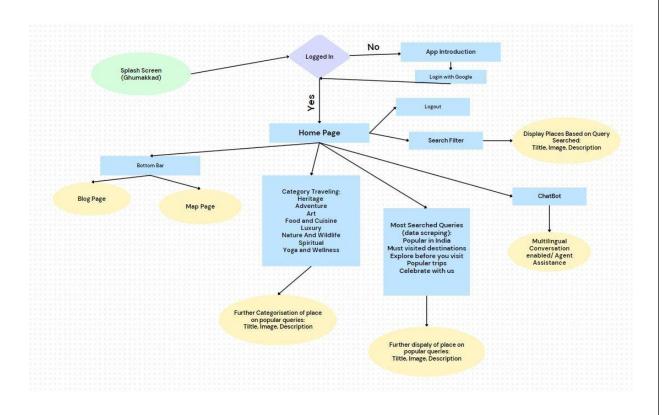


Fig. 4

Chapter 5: Implementation

5.1 Getting Started through Ghumakkad and Indicators:

- 1. Clean and intuitive UI design, ensuring ease of navigation for users.
- 2. Implemented a consistent color scheme and visual elements.
- 3. User-friendly layouts for different screen sizes and orientations.



Fig. 5.1 (Splash Screen)



Fig. 5.2 (Sliders)

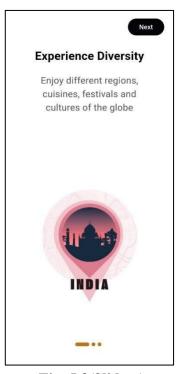


Fig. 5.3(Sliders)



Fig. 5.4(Sliders)



Fig. 5.5 (Login Page)

5.2 Home Page:

5.2.1 Search through various Categories: Our app showcases diverse destinations based on parameters such as Heritage, Adventure, and Spiritual significance. Additionally, it highlights major tourist spots, providing insights to uncover hidden gems. This comprehensive feature empowers users to explore the rich tapestry of our country, catering to varied interests and preferences.



Fig. 5.6 (Homepage)



Fig. 5.9 (Homepage)



Fig. 5.7(Heritage)

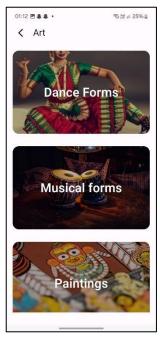


Fig. 5.10 (Art)



Fig. 5.8 (Rock Architecture)

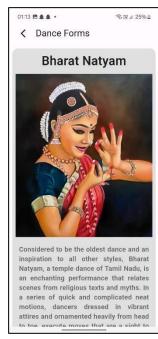


Fig. 5.11(Dance Forms)

5.2.2 Most Searched Query Results: Our app showcases popular user inquiries from travel websites, offering detailed solutions sourced through data scraping from platforms like Incredible India, TripAdvisor, and Yatra. This comprehensive approach ensures users access accurate and relevant information conveniently via our app, enriching their travel experiences.





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Fig. 5.12 (Popular Queries) Fig. 5.13 (Popular Queries)

Fig. 5.14 (Popular Queries)



Fig. 5.15 (Popular Queries)



Fig. 5.16 (Popular Queries)

Chapter 6: Results and Analysis

A centralized, user-friendly mobile application built on the Flutter framework has been developed, offering a comprehensive solution for tourists. This application incorporates features such as real-time information updates, local insights, and responsible travel tips, providing users with a one-stop platform for all their travel needs. By fostering engagement and encouraging participation, the platform aims to maximize its effectiveness in promoting tourism and showcasing India's rich cultural heritage and diverse attractions.



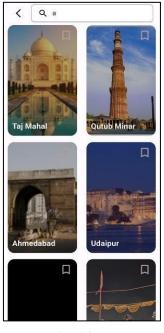




Fig. 6.1

Fig. 6.2

Fig. 6.3

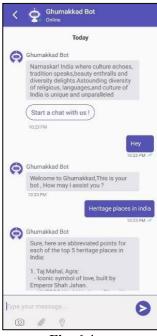


Fig. 6.4

- 6.1 Result of Ghumakkad Blog which is uploaded through **firebase**.
- 6.2 Result of Search-Filter where data is fetched through **MongoDb**.
- 6.3 Result of most searched query for eg. Popular Trip in 48 hrs through **Web scraping**.
- 6.4 Result of Ghumakkad Chatbot giving accurate result for query

Chapter 7: Conclusion of the Report and Future Scope

In essence, Ghumakkad revolutionizes travel planning in India with its innovative mobile app, offering a centralized platform amidst fragmented tourism information. Through comprehensive guides and a vibrant culinary section, it celebrates the diverse attractions and flavors of the country. User-generated reviews and intuitive search options empower travelers to explore hidden gems tailored to their interests. With 24/7 chatbot support, Ghumakkad ensures seamless assistance for all travel inquiries. By promoting responsible tourism practices and enriching visitor experiences, Ghumakkad contributes to the growth and sustainability of India's tourism industry, offering memorable and authentic journeys for every explorer.

7.1 Future Scope:

Looking ahead, the "Ghumakkad" application holds immense potential for further development and expansion. Some key areas for future enhancement include:

- 1. Personalization Features: Introducing personalized recommendations based on user preferences, past travel history, and demographics to enhance user engagement and satisfaction.
- 2. Integration of Augmented Reality (AR) and Virtual Reality (VR): Incorporating AR and VR technologies to offer immersive experiences, allowing users to virtually explore destinations, landmarks, and cultural sites before their actual visit.
- 3. Multilingual Support: Implementing multilingual support to cater to the diverse linguistic preferences of users, thereby making the application more accessible and user-friendly for international travelers.

Finally, expanding language support to include more regional languages and enhancing accessibility features can make the app more inclusive and user-friendly for a broader audience, further solidifying its position as a leading travel companion in India.

Chapter 8: References

Journal Article

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