

ESCORT NAVIGATOR - A COMPANION TO YOUR TRACK

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ABSTRACT:

When you are relocated to a new place or you are shifted to a new area far from your home town, makes you feel difficult to survive. It becomes hard to go out and find the things you want with zero knowledge. To overcome this situation a website or application which will help you find places near you, help you choose the best for you, and can help you suggest the things people in your area choose. It will basically provide you a guide of an area, It is similar to that of a tourist guide. The innovative tourist guide application designed to enhance the travel experience for users exploring new destinations. Leveraging cutting-edge technologies such as artificial intelligence, augmented reality, and real-time data analytic, it offers personalized and immersive guidance tailored to each user's preferences and interests. The application

provides comprehensive information about tourist attractions, historical sites, restaurants, accommodations, and local events. Through advanced algorithms, suggests customized itineraries based on factors such as time constraints, budget, and user preferences. . By providing targeted recommendations and promoting lesser-known attractions, the application contributes to the equitable distribution of tourism traffic, fostering sustainable development and economic growth in diverse regions. Overall, it represents a paradigm shift in tourist guide applications, harnessing the power of technology to deliver personalized, immersive, and enriching travel experiences. Whether exploring iconic landmarks or hidden gems, users can rely on enhancing their journey and create lasting

memories. **Keywords:** Search Algorithms, Tracking, mapping services.

I INTRODUCTION

There are several sectors in India where the worth and potential of their assets have not really been fully utilized or harnessed. The tourism sector is one of them. Tourism accounts for 6.8% of India's GDP and is the third largest earner of foreign exchange with earnings of \$18.13 billion in 2013. India ranks 42 in foreign tourist's arrivals as per the United Nations World Tourist Organization. If many in the world still have a picture of India being a dirty and often unsafe place, they have only half the story. There has been considerable progress since the days when India was seen as a land of beggars, snake charmers and elephants. Admittedly there's much we need to do to get rid of this image by enhancing levels of hygiene and security especially for women visitors, but we have been blessed with many positives. For the first time in our history, a nationwide Government backed initiative close to the heart of our Prime Minister has been launched for a Clean India. The Swachh Bharat campaign is still in a nascent stage but should show positive results over the next few years. The tourists can enjoy different kind of tourism i.e; Eco

Tourism, Health Tourism, Adventure Tourism, Cultural Tourism, Heritage Tourism, Wildlife Tourism, Religious tourism, etc. Only in India the tourists can enjoy all these kinds of tourism together. The survey according to FICCI (Federation of Indian Chambers of Commerce and Industry) states that there is a very bright future for the tourism industry in India.

India has always been known for its diverse climate, hospitality, uniqueness etc. this is the reason why India has been doing well in all types of tourism in India. India is proud to have over 30 World Heritage Sites spread over the length and breadth of the country [1]. They are so diverse with each site offering something unique to the tourist to savor. These can be better marketed to draw leisure tourists who wish to catch a glimpse of our varied and rich cultural history. In more modern terms, the presence of highly skilled medical doctors and relatively inexpensive (as compared to other countries) medical facilities with high-class hospitals paves the way for a huge growth in what has come to be known as "medical tourism. The main structure of tourism industry is as It is

delighted to see considerable progress made in branding, which is so crucial in the business of selling India as a travel destination.

II. LITERATURE SURVEY

1. Mobile Application Development for Tourism.

Author: Kim et al. Year: 2017.

According to Kim et al. (2017), mobile applications play a crucial role in enhancing tourists' experiences by providing real-time information, personalized recommendations, and navigation assistance. Research by Gretzel et al. (2015) emphasizes the importance of user-centered design and usability testing in developing tourist applications to ensure they meet the needs and preferences of diverse user groups.

2) Location-Based Services (LBS).

Author: Feng & Wang. Year: 2018.

Location-based services enable personalized recommendations and navigation assistance based on the user's current location (Feng & Wang, 2018). Wang et al. (2016) discuss the

integration of LBS with tourist applications, highlighting the benefits of real-time updates and context-aware content delivery.

3. Augmented Reality (AR) and Virtual Reality (VR) Integration.

Author: Liu et al. Year: 2019.

AR and VR technologies offer immersive experiences for tourists, allowing them to visualize destinations and attractions before visiting (Jung & tom Dieck, 2017). Liu et al. (2019) explore the integration of AR into tourist guide applications, enabling users to access additional information and multimedia content by scanning physical objects or landmark.

4. Content Curation and Recommendation System.

Author: Boukhelifa et al. Chen et al. Year: 2019.

Content curation algorithms analyze user preferences and behavior to recommend personalized attractions, restaurants, and activities (Boukhelifa et al., 2018). Chen et al. (2019) propose a recommendation system for tourist attractions based on user-generated content and social media data, enhancing the relevance and accuracy of recommendations

III SYSTEM ANALYSIS

EXISTING SYSTEM

We can find things from the Google maps as well, by searching it manually .We can also Find the place reviews from you tube videos, when people visit they share their experience and

Record them, can help you to find the places which are best according to you.

Limitations of Existing system

- Have to search each and everything manually
- Lots of time is needed to explore
- Lots of efforts are needed
- Confusion
- Lack of acknowledgement
- Only famous things are known

PROPOSED SYSTEM

We can overcome the issues that we face in new place or area by using this application which will help you find things more easily. You can simply login or search an area, logging in will help you to store and retrieve your information and can also keep a track on yourself. Using Search Algorithms we

can fetch the data easily in the application. For displaying maps, we can utilize mapping libraries and technologies like: Google Maps API: Provides wide range of mapping services, Leaflet: open-source JavaScript library for mobile-friendly I maps, Map-box: Offers customization maps with various styles. Implementing caching algorithms like Least Recently Used- LRU can optimize performance, when dealing with frequently accessed location data. Providing encryption and security algorithms like Symmetric Encryption which includes AES, DES to ensure the safety of user data.

Proposed system Advantages:

- Accuracy: Guidance applications can provide precise instructions or recommendations, leading to accurate outcomes.
- Efficiency: By providing guidance, these applications can streamline processes, saving time and resources.
- Safety: Guidance applications can enhance safety by ensuring that tasks are performed correctly and according to established protocols. They can provide real-time alerts and warnings to prevent accidents or errors. Consistency: Guidance applications help maintain

consistency in decision-making and execution of tasks.

- **Cost-effectiveness:** By streamlining processes, improving efficiency, and reducing errors, guidance applications can help organizations save costs in the long run.

the form of input to be given to the system, the operation performed and the output expected. They are basically the requirements stated by the user which one can see directly in the final product, unlike the non-functional requirements.

IV IMPLEMENTATION

Architecture:

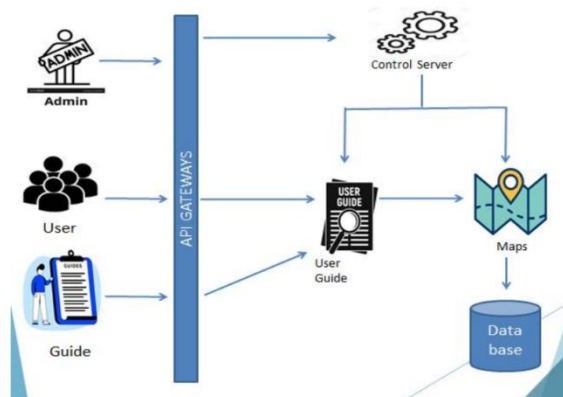


Fig-1. Architectures of the system model

1 MODULES:

These are the requirements that the end user specifically demands as basic facilities that the system should offer. All these functionalities need to be necessarily incorporated into the system as a part of the contract. These are represented or stated in

1.1 ADMIN MODULE:

In this module, Admin has four sub modules, they are: **Data Management:** Admin manages and supervise the data, and can transform, delete and update the process. **User Management:** Manages user registration and authentication. **Access Control:** Admin have a control over the access control and permissions to the users and other participants. **Contents Management:** Admin manages the contents of the page

1.2 USER MODULE:

In user module, the sub modules are: **User Profile Management:** Facilities for users to update their profile information like username, email, password, and profile pictures. **User Authentication:** Registration and login processes to allow users to create accounts and securely sign in. **User Analytic:** Tracking user behavior and interactions within the application for analytic purposes. **Password Recovery:** Functionality to help

users recover their accounts or passwords in case they forget or lose them.

1.3 GUIDE MODULE:

In Guide module, the sub modules are Tutorials and walk-throughs: The guide module offer step-by-step tutorials to help users how to navigate in local areas. Help Center: The module serve a help center where users can find information about troubleshooting, contact support, or get assistance. Updates and Announcements: The guide module include a section for updates and announcements, informing users about new features, changes, related to website. FAQs (Frequently Asked Questions): A guide module include a list of frequently asked questions and answers of common queries and concerns they have. 8

2. NON-FUNCTIONAL REQUIREMENT

These are basically the quality constraints that the system must satisfy according to the project contract. The priority or extent to which these factors are implemented varies from one project to other. They are also called non-behavioral requirements. They basically deal with issues like:

- Portability
- Security

- Maintainability
- Reliability
- Scalability
- Performance
- Re usability
- Flexibility

3. ANDROID ENVIRONMENT

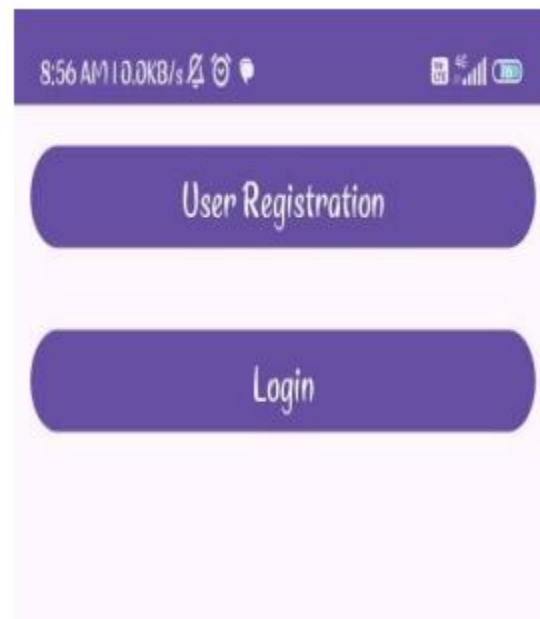
Android apps are written in the Java programming language. The Android SDK tools compile your code—along with any data and resource files—into an APK: an Android package, which is an archive file with an .apk suffix. One APK file contains all the contents of an Android app and is the file that Android-powered devices use to install the app. Once installed on a device, each Android app lives in its own security sandbox: The Android operating system is a multi-user Linux system in which each app is a different user. By default, the system assigns each app a unique Linux user ID (the ID is used only by the system and is unknown to the app). The system sets permissions for all the files in an app so that

only the user ID assigned to that app can access them. Each process has its own virtual machine (VM), so an app's code runs in isolation from other apps. By default, every app runs in its own Linux process. Android starts the process when any of the app's components need to be executed, then shuts down the process when it's no longer needed or when the system must recover memory for other apps. In this way, the Android system implements the principle of least privilege. That is, each app, by default, has access only to the components that it requires to do its work and no more. This creates a very secure environment in which an app cannot access parts of the system for which it is not given permission. However, there are ways for an app to share data with other apps and for an app to access system services: It's possible to arrange for two apps to share the same Linux user ID, in which case they are able to access each other's files. To conserve system resources, apps with the same user ID can also arrange to run in the same Linux process and share the same VM (the apps must also be signed with the same certificate). An app can request permission to access device data such as the user's contacts, SMS messages, the mountable storage (SD card), camera, Bluetooth, and more. All app permissions must be granted by the user at

install time. That covers the basics regarding how an Android app exists within the system. The rest of this document introduces you to: The core framework components that define your app's manifest file in which you declare components and required device features for your app. Resources that are separate from the app code and allow your app to gracefully optimize its behavior for a variety of device configurations,

V RESULT AND DISCUSSION

Registration and login page:



Registration page:

Enter Name
Enter User Name
Enter password
Retype Password
Enter Email
Enter Mobile
Enter Address

Select User Type

user

Register

Enter User Name
Enter Password

Login

Registered Successfully

User page:

Search Place
Near by Places
View Messages
Search Guide
Logout

Submit OTP to complete registration:

Enter OTP

Submit OTP

Registration completed:

Search Place Page:

Search Place By Name or Location

Enter Place Name or Location

Select Type of Place

famous

Select Category

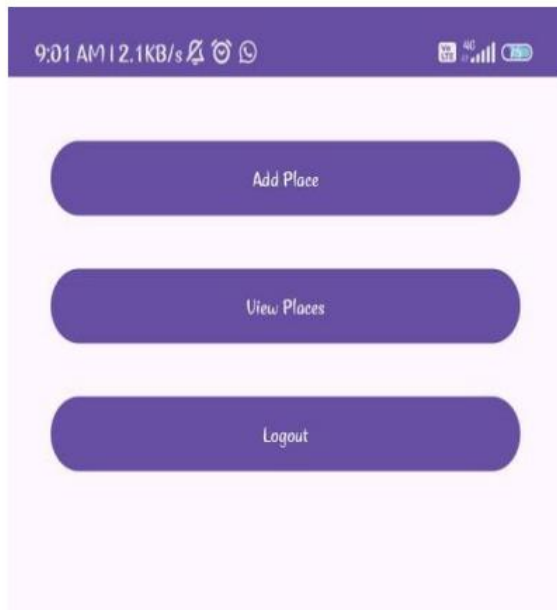
shopping

Search Place

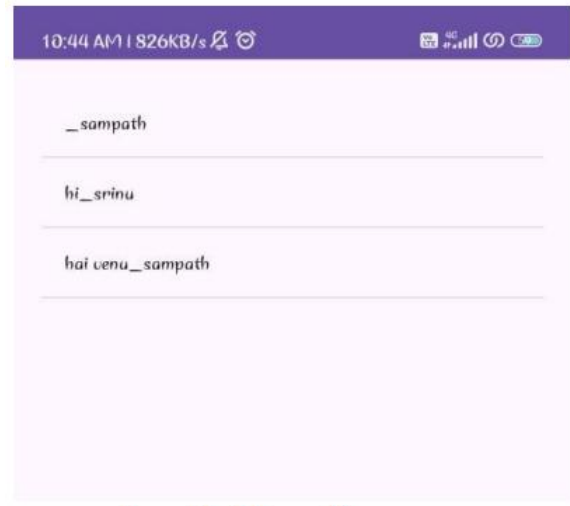
Search Guide:



Admin Page:



View all:

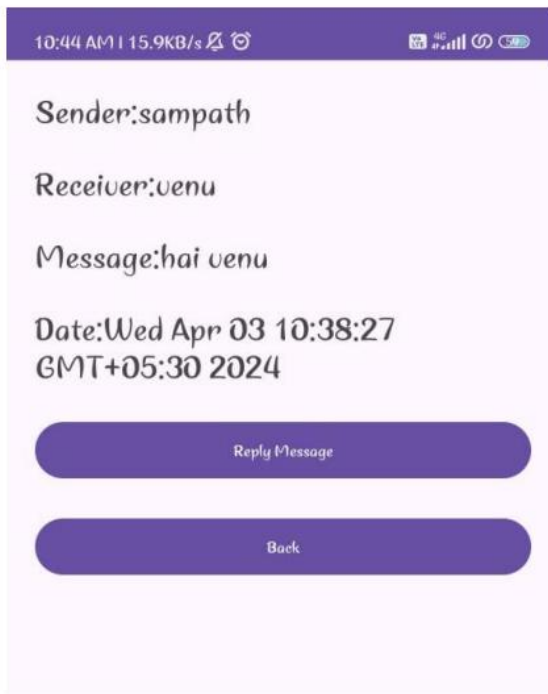


Admin add places:



Reply to the messages:

Guide page:



VI CONCLUSION

India's travel and tourism sector ranks 7th in the world in terms of its total contribution to the country's GDP, according to a new report of the World Travel and Tourism Council (WTTC). According to data, the travel and tourism sector generated Rs 14.1 trillion (USD208.9 billion) in 2016, which is world's 7th largest in terms of absolute size; the sum is equivalent to 9.6% of India's GDP. Additionally, the sector created 40.3 million jobs in 2016, which ranks India 2nd in the world in terms of total employment generated. The sector accounts for 9.3% of the country's total jobs. India's Travel and Tourism sector was also the fastest growing among the G20 countries, growing by 8.5%

in 2016. A further 6.7% growth is forecast for 2017. As travel and tourism marketing has shifted online, destinations have increasingly found themselves competing in a global marketplace. Over the past six decades, almost without interruption, the volume of cross-border travel has increased year-on-year, and today travelers are able to access their chosen destinations more easily. In order to stand out, those responsible for destination marketing have sought to make their destinations attractive to emerging consumer segments, particularly those segments of the market that are perceived to travel more frequently and exhibit higher levels of spending than others. Tourism is very sensitive to economic, environmental, and socio-political events affecting tourists' willingness to travel. In the absence of insurance cover and social security, the poor can be particularly vulnerable to sudden downswings in demand. However, tourism demand often bounces back quickly when circumstances change. If the Indian government continues to adopt policies that encourage travelers, such as the new visa regime, enable investment in vital infrastructure, and allow companies to do business. India is a beautiful and diverse tourism destination, with the right policies in place it will no doubt continue to grow

towards ranking even higher in terms of its tourism economy

FUTURE ENHANCEMENT

- To enhance a guiding application for the future, you could consider implementing several features and improvements:
 - **Personalization:** Integrate machine learning algorithms to personalize recommendations based on users' preferences, past activities, and feedback. This could include suggesting tailored itineraries, activities, and destinations.
 - **Augmented Reality (AR):** Incorporate AR technology to provide users with immersive experiences, such as overlaying information about landmarks, historical sites, or wildlife onto the real-world environment through their smartphone camera.
 - **Offline Accessibility:** Improve offline functionality to allow users to access maps, guides, and other essential information without an internet connection. This is particularly useful for travelers in remote areas or those with limited data connectivity. **Language Support:** Expand language support to cater to a broader audience. Implement features like real-time translation or multilingual guides to accommodate users from different linguistic backgrounds.
- **Community Interaction:** Introduce community features where users can share their experiences, recommendations, and travel tips. This could include user-generated content such as reviews, photos, and travel stories, fostering a sense of community within the app.
- **Accessibility Features:** Ensure that the application is accessible to users with disabilities by implementing features such as voice commands, screen readers, and high contrast modes.
 - **Integration with Smart Devices:** Allow integration with wearable devices or smart assistants like smart watches or voice-activated speakers for hands-free access to information and navigation while on the go.
 - **Safety Features:** Implement safety features such as real-time alerts for natural disasters, political unrest, or health advisories in specific regions, ensuring travelers stay informed and secure during their journeys.
 - **Integration with Booking Services:** Enable seamless integration with booking platforms for accommodations, tours, and transportation services, allowing users to plan and book their entire

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