

Survey on Tourist Guide Applications

A survey paper on various techniques implemented in the industry to improve touristsatisfaction

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Abstract: The amount of information available on the internet and its number of users have experienced a huge increase in the past last decade. All this information may be particularly useful or necessary for those users who wishes to plan for visiting an unknown destination. However, list of possibilities offered by web search engines or even specialized tourism sites maybe vast. The growth of this long list of option is very complex and time consuming for tourist in order to select the one that fits better with their need. Modern tourists avoid fixers to make their own decisions about their trip, choose certain alternatives to perform booking and pay for their order directly. The project objective is to design an intelligent AI-Based Tourist Guide system algorithm. In such a way that it will completely eliminate the middleman that is tourist guide and make the working Application which contains a task which can be covered by single guide and each individual can arrange their own trip independently

I. INTRODUCTION

AI-Based Tourist Guide systems and rapid transit systems are nerves of economic developments for any nation. In Today's World companies traditionally outside the tourism field are entering the sector, mainly from IT and media sectors. Industry features (mainly that IT and media are information- based businesses and are umbrella industries) might explain this trend, or even the change in consumer behavior. For example, consumers use IT not only for information gathering but also to order services over the Internet. A new type of user is emerging who doesn't just try one or two services but all kinds of travel and leisure services. Such users don't mind becoming their own travel agents, but given the extensive use of distributed systems on the Internet, there comes the urgent need to find, combine, and sift through the right pieces of information intelligently. Today, AI-based developments in the field are at the forefront, such as individualized pricing (priceline.com), reversed multi- attribute auctioning (my travel-dream.com), recommendations in bundling products (as described later), Semantic Web applications (Harmonise.org), and mobile applications (described later).

We can expect this innovation to continue—at both the business level (such as dynamic market structures and prices) and the technology level. In addition, the IT and tourism field represent the nucleus of a new industry that will produce new products, skills, and jobs. Regarding ontologies applied to the tourism sector, they are supposed to improve search and interoperability inside the vast amount of information available online, helping the categorization within the existing disorder. In addition, there are several kinds of ontologies, according to the degree of formality, complexity of the graph structure, and the expressivity of the language used to describe them.

This project reduces the manual work done by user to search information about the locations and will provide it as a one click solution

II. AIM AND OBJECTIVES

The aim of this project is to design an intelligent AI- Based Tourist Guide system algorithm to completely eliminate guide which is provided by tours and travel agency .and customize the whole schedule of trip and improve efficiency of existing Tourism system. Some of the main objectives of the project are as follows:

- A. To design a knowledge base system which will be built on the study of human's behavior
- B. To help in designing the efficient, fast path searching algorithms with optimization.
- C. To provide the structured database, each place with its short description, timings, ratings, etc.
- D. To find shortest path between two points (location) in map
i.e. navigation systems.
- E. To make the entire schedule of whole journey and also provide recommendation of nearby best hotels to stay which is the best place to visit, which is the best food.

III. LITERATURE SURVEY

The paper [2] published by Guneshwari Nemade provides information about various recommendation systems which can be used like Dedicated Recommendation Systems, Privacy Protecting Recommendation Systems, Distributed Recommendation Systems, etc.

The paper [3] published by Jay Ashok Gudhka provides some unique features such as Currency convertor, Live location sharing, Emergency services, etc.

The paper [4] published by Somanna P D contains information about Google Maps API. Google Maps API allows maps to be added based on Google Maps data to an application. It also contains information about Firebase which is an online real- time database.

The paper [5] published by Akil H. Sayyad , Santosh A. Shinde contains an android application which uses contents from an offline booklets to provide information to the users

The paper [6] published by Mr. Sagar Patil contains a unique way of online ticket booking service (by using QR code) for museums which tourists visit

The paper [7] published by Gauri Namate provides information about Privacy Protecting Recommendation Systems, Distributed Recommendation Systems, etc

The paper [8] published by Preethi Harris is a web-based application which uses Times of India API to get all the present news with photographs and recordings in India and around the globe. Some of the unique features are Weather based Recommendations, Query Enquiry, etc.

The paper [9] published by Harini, Ashmita, Deepan Raj K and Janani S consist of a mobile application named “Virtual Tourist Guide”. This application contains augmented reality technology which can be useful for augmenting real life places in the application. The paper [10] published by Mangesh Ahire, Rahul Kotwal, Raj Sutare, Sagar Kambale and Abhay Gaidhani consist of a web application which is available in both English and Marathi language. This application uses GPS module along with RFID sensor for authorizing users and monitoring the tourist places which they visit.

The paper[11] published by Ashar Khan, Arpita Nagrare, Mohit Agrawal, Sharon Vincent, Aditya Shende and Manjeet Marodkar is about an android application which creates a schedule for the traveler travelling to city and wanted to explore the city by specifying the time in hours.

The paper[12] published by Jay Ashok Gundka, Aniket Ajay Singh, Ravindra Shivram Bind and Gaurav Deshmukh is about an android application named “Smart Travel Guide ” which contains features from application such as google maps, trivago,etc

The p The paper[11] published by Ashar Khan, Arpita Nagrare, Mohit Agrawal, Sharon Vincent, Aditya Shende and Manjeet Marodkar is about an android application which creates a schedule for the traveler travelling to city and wanted to explore the city by specifying the time in hours.

The paper[12] published by Jay Ashok Gundka, Aniket Ajay Singh, Ravindra Shivram Bind and Gaurav Deshmukh is about an android application named “Smart Travel Guide ” which contains features from application such as google maps, trivago,etc

The paper [13] published by Kavipriya C., Kowsalya , Nandhini , Rubigha and Mr.S.Paradaman is about an android application which virtual assistant to interact with the users so that the applications seems more user friendly and appealing

Table 1: Comparison Table

Author	Title	Description
Gunes hwari Nema de	Types of Recommendation System	This paper includes information about various types of recommender systems which we can use in our Project Strengths: Contains good information about the recommender system which we can use in our project Weakness: Does not contain any information about any particular tourist application
JayAshok Gudh	Tourist Guide Application	This paper includes some unique features such as Currency convertor, Live location sharing, Emergency services, etc. Strength: We can use this features in our project to increase our features list.
Somanna P D	Online TouristGuide	Strength: It contains valuable information for us as Firebase will be our main database through which all the data will be provided to the mobile application

Author	Title	Description
Akil H. Sayyad	Augmented Reality Based Mobile Tour Guide System	This paper contains an android application which uses contents from an offline booklets to provide information to the users Strength: This feature can be implemented to gain additional information about a particular location as certain information can be only available in booklets
Gauri Namate	Security in Tourist Application	It provides information about Privacy Protecting Strength: Since privacy is one of the major concerns this information is very crucial to increase security in our application
Mr. Sagar Patil	QR based Tourist Guide	This paper contains a unique way of online ticket booking service (by using QR code) for museums which tourists visit Weakness: QR based application can be used for proper management but is not viable since our application's scope is world wide
Preethi Harris	Web Based Tourist Guide	This application uses Times of India API to get all the present news with photographs and recordings in India and around the globe. Some of the unique features are Weather based Recommendations, Query Enquiry, etc. Strength: This paper contains valuable information about how to use various APIs to get location information
Harini	Virtual Tourist Guide	This application contains augmented reality technology which can be useful for augmenting real life places in the application. Weakness: This feature will make the application more attractive but is not applicable since our application has a worldwide scope.
Mangesh Ahire	Bilingual Tourist Guide	This application uses GPS module along with RFID sensor for authorizing users and monitoring the Tourist places which they visit.
Ashar Khan	Interest and Time Based Smart Travelling Guide using Data Mining	This paper is about an android application which creates a schedule for the traveler travelling to city and wanted to explore the city by specifying the time in hours Strength: The data mining techniques mentioned in this paper can be used in our application to get more accurate results.
Jay Ashok Gundka	Smart Travel Guide	This application contains features from application such as google maps, trivago, etc Strength: Various APIs of trivago, google mentioned in the paper can be used for our projects
Kavipriya C.	Android Smart Traveler Guide Using Virtual Assistant	This paper is about an android application which virtual assistant to interact with the users so that the applications seems more user friendly and appealing Strength: Virtual assistant feature can be useful to make our application more interactive with the users

IV. CONCLUSION

The conclusion of this paper is we first specify the idea of our project and introducing it. After that providing our aims and objective which is followed by the various literature survey which we performed. Therefore the application which we are proposing will contain mix features from all of the above mentioned application on which we performed literature survey.

V. REFERENCES

- [1] Problem Statements released by Smart India Hackathon 2020.
<https://www.sih.gov.in/sih2020PS>
- [2] Guneshwari Nemade, Rohit Deshmane, Pratik Thakare, Mahendra Patil, V.D. Thombre, "Smart Tourist Recommendation System", IRJET.
<https://www.irjet.net/archives/V5/i6/IRJET-V5I648.pdf>

[3] Jay Ashok Gudhka, Aniket Ajay Singh, Ravindra Shivram Bind, Gaurav Deshmukh, "SMART TRAVEL GUIDE (STG)", IRJET.
<https://www.irjet.net/archives/V6/i3/IRJET-V6I3383.pdf>

[4] Somanna P D, Suraj S Rao, Vinaykumar, Shuvam Prakash, G S Madhan Kumar, "SMART CITY TRAVELLER", IRJET.
<https://www.irjet.net/archives/V5/i4/IRJET-V5I4557.pdf>

[5] Google Maps Resources Manual
<https://developer.Google Maps.com/docs/resources/categories>

[6] Mr Sagar Patil, Ms. Shraddha Limbekar, Ms. Amruta Mane, Ms. Netra Potnis, "Smart Guide – an approach to the Smart Museum using Android", IRJET.
<https://www.irjet.net/archives/V5/i2/IRJET-V5I2147.pdf>

[7] Gauri Namate, Rohit Deshmane, Ravindra Shivram "Security in Tourist Applications", IRJET.
<https://www.irjet.net/archives/V6/i3/IRJET-V6I31345.pdf>

[8] Preethi Harris, Rihan Siddhi, S. Sricharan, B. Suntharam, "Bon Voyage: A travel Guide based on Web application", IRJET.
<https://www.irjet.net/archives/V6/i3/IRJET-V6I31345.pdf>

[9] Harini B, Ashmita K, Deepan Raj K R, Janani S R, "VIRTUAL TOURIST GUIDE)", IRJET.
<https://www.irjet.net/archives/V8/i3/IRJET-V8I3353.pdf>

[10] Mangesh Ahire, Rahul Kotwal, Raj Sutare, Sagar Kambale and Abhay Gaidhani
<https://www.irjet.net/archives/V8/i3/IRJET-V8I3275.pdf>

[11] Ashar Khan, Arpita Nagrae, Mohit Agrawal, Sharon Vincent, Aditya Shende and Manjeet Marodkar
<https://www.irjet.net/archives/V5/i10/IRJET-V5I1044.pdf>

[12] Jay Ashok Gundka, Aniket Ajay Singh, Ravindra Shivram Bind and Gaurav Deshmukh
<https://www.irjet.net/archives/V6/i3/IRJET-V6I3383.pdf>

[13] Kavipriya C., Kowsalya , Nandhini , Rubigha and Mr.S.Paradaman
<https://www.irjet.net/archives/V6/i3/IRJET-V6I3696.pdf>

