

# VIRTUAL TOURIST GUIDE

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**Abstract:** The phenomenon of searching for travel information on the Web is reported. The issues of how predominant travel searching is on the Web, how people are searching for travel information on the Web, and what terms people are using to express their travel-related information needs are investigated. Geographical information accounts for nearly 50% of this travel searching, with general travel information accounting for just less than 10%. An analysis of individual terms in travel queries shows there is substantial searching for travel-specific websites such as mapquest, travelocity, and orbitz. Travel searchers appear to be target-specific events, again showing a strong geographical bias along with a temporal component of the underlying information intent. The distribution of travel topics is skewed, with several topics being “very focused” and others being “very general.” A classification scheme for travel-related Web queries was developed, which should be helpful for other researchers in the online travel searching area. The implications for both content providers of travel information and for searchers of travel information on the Web are discussed.

**Keywords:** Web search engines; Web searching; Travel searching; Travel queries; Travel searching terms; Travel information search; Travel query terms.

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## 1. INTRODUCTION

Web searching has become a daily behavior for many people, with the Web now the first choice for many of those seeking online information. Their tool of choice is a search engine, with more than 73% of people using a search engine to locate information on the Web. In order to understand, predict, and influence this usage, it is important to understand both how people use Websearch engines and the Web-searching trends that are emerging within specific domains. Examining Web searching within specific domains is an important area of research that has the potential to increase the understanding of Web searching, to advance the knowledge of Web searchers' information needs, and to influence positively the design of Web information system.

## 2. LITERATURE REVIEW

Nowadays tourists expect to get personalized access to tourism information at anytime, from anywhere through any media. Mobile tourism guides provide the user with such a ubiquitous access . With the advancement of technology, mobile devices have made it easier to access information anytime, anywhere. The trend is to replace the printed tour guides with mobile applications. Travelers tend to use such mobile applications due to the convenience they present over conventional guide books. When analyzing the tour guide systems of other countries it was found that there have been many researches carried out regarding mobile based tour guide systems. When analyzing the tour guide systems of other countries it was found that there have been many researches carried out regarding mobile based tour guide systems. The system is designed around two main components, the mobile application and the web server. The web server serves the stored information through the mobile application. The data from the Global Positioning System (GPS) is used to provide location information to the mobile device. "Google Maps" is used where map based services are required. The application allows a 360 degree view of the location. The virtual tour starts at the entrance, and guides the user by displaying arrows

for directions. By navigating through the virtual site, user is able to get a visualization of the place before the visit. This is an attractive feature for tourists and could encourage them to actually visit the place. The virtual tour was constructed using a large collection of images that were captured on site. These were then processed and stitched together to give a realistic three dimensional view of the location. The camera view and the location tagging function is achieved by using the GPS and the built-in compass. In the camera mode, the application starts collecting GPS data. When a user is within a 50m radius of a tagged location, a notification is displayed on the mobile device to indicate that the particular point of interest is nearby. This enables the user to locate the point of interest. Tourism E-Guide propose architecture of mobile tourist guide system for Android Mobile Phones that is able to provide tourism information to the mobile users conveniently. It can realize to query information for restaurant, bus stops, so on and gives multi output and hence it has more practical significance. The main idea behind the project is to develop an android application which will help tourists to find the better place at one instant. The long-time which tourists waste on searching for the better tourist spots like hill station, waterfall, beaches, etc. for their enjoyment in the new city which is totally unknown to them will get reduced, if they use this application. Hence this idea was very new and useful for all those who love to travel in a new city on a regular basis.

### Advantages

1. This system solves all problems of the client just by asking some questions. And it provides three best options that fit into user's requirements along with the place details and facilities.
2. It saves their money and time in finding and consulting a travel agency where they charge more.
3. This system make easily access from any devices from anywhere, anytime, etc.
4. A client can get information regarding a particular place and area.
5. Present system works on Microsoft Visual Studio so functionality easily we can add or remove.
6. Databases is inbuilt to store information regarding client and admin.

### Disadvantages

1. May get inaccurate results if data is not inserted in correct manner.
2. Requires an active internet connection.
3. User should have registered first to used this services.
4. Present system provides limited information for the places.
5. It has inbuilt database we can't connect external database.
6. It works on website i.e on laptop and computer only not on smartphone.

### Limitations

1. Do register first.
2. Give data of a particular areas only at a time.

## 3. RESEARCH METHODOLOGY

This chapter deals with the research and methodology to do in the project work. It shows detailed and deep insights into the experimentation associated with the project. Project planning is represented in a description. Also, future working of our project is presented.

### 3.1 Introduction of Research Methodology

Tourism as a complex process has its operation based on natural and human resources, elements that constitute the most important attraction factor. Tourism activity was defined as the activity of a person who travels and has a residence in places other than those usually frequented, for no more than one consecutive year for leisure, business or other purposes.



The system is designed around two main components, the web application and the web server. The web server serves the stored information through the web application. "Google Maps" is used where map based services are required. The application may utilize wireless connectivity where available or 4G services to access the central web server through the Internet. Figure illustrates the logical system architecture of the web based tour guide. The user interacts with the web sites through phone to access the tour guide information. The web server serves the correct information based on the location information and the user selections. This architecture provides high level of flexibility to provide up to date information to the users on request. External database provides a single point of update to the system and reduces the size of the application. Having a light weight application increases the systems usability and reliability. The web communicates with the web service through the Internet using XML and SOAP messages. The web application is designed to operate in two modes; "Map view" Map view provides three main functions, Path selector, Information provider and Virtual tour. Map view is developed using the Google Maps API. By selecting the interesting places marked on the map, the user is able to get access to the stored information. The application is able to provide this information while the user visiting the place or as off-site information.

### 3.1.1 Working

First person will register in our system and their verification will be done. In the system there will be modules of places. If the person is new his/her details will be filled in the form and store in our database. The person will be able to select place from drop down menu in the list. Then he/she will be able to see the details of place like the history of that place, story of that place, every details of that place. We will also add feature of booking cab/hotels from same app. We will also suggest famous food of that place. We also add feature that the app will answer their question but the question be selected. We will also give full 3d view of that places in app so the people can easily judge the place and make a plan for it.

### 3.2 Modules and their Description

#### 1. Agent Registration/Login

In Agent Module a new agent can register with their name, mobile no, company name, and package type they offer according to their policy.

## 2. Admin Login



In Admin Module a admin can login in into and see what are the inquiry are coming to a particular agent I.e client queries and in what they are interested on. Admin can also check how many agent are register with their unique agent id's

## 4. Algorithms:-

**KNN Algorithm:-**In this algorithm we have to give the number of elements in the cluster and then find the distance between the user requirement and the items in the cluster. Then sorting of the distance and the k th nearest neighbor based on the k th minimum distance. Gather the categories of the neighbor.

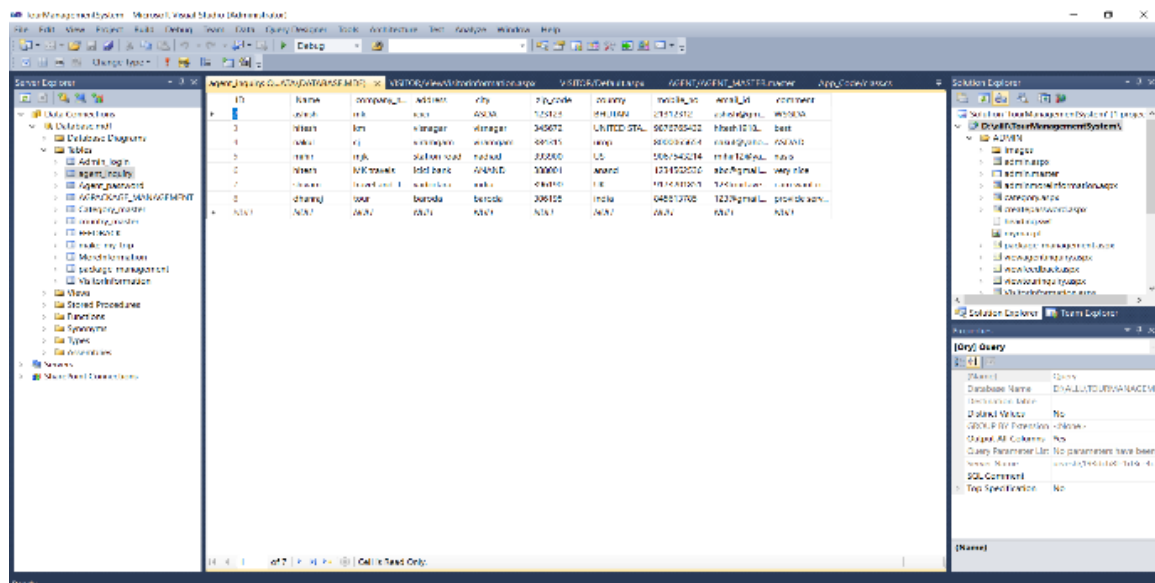
**K-means:-** k-means clustering aims to partition n observations into k clusters in which each observation belongs to the cluster with the nearest mean, serving as a prototype of the cluster.

**Collaborative filtering:-**read the array of the main user then and match it with the other users. The selecting of the nearest one and filtering the choices with the main user. Recommending the remaining choices with the main user.

## 5.Data

### 1)Agent:

In below diagram you can see the new agent are registered are stored in databases in tabular form. With different attributes like name, company name, mobile no, etc. and admin can handle all the agent.



**2)Feedback:** In below diagram you can view a various entries I.e feedback which is given by client to the agent on their tour information.

NAME	EMAILID	CONTACTN...	FEEDBACK
ashish	ashish@gm...	456466	very nice
nakul	nakul@yaho...	800004332	good websi...
hitesh	hitesh@gm...	7878654343	good websi...
NULL	NULL	NULL	NULL

3) **User:** In this you can get the detail of how many user are sign up in our website. And also see the query asked by them.

tour_id	name	contact_no	emailid	city	your_inquiry
2	ashish	9765436543	ashish@gm...	anand	I INTERESTE...
3	hitesh	7878234534	hitesh@gm...	anand	adfsaf
3	nakul	80000034534	nakul@yaho...	anand	xcfdgxcvc
2	mihir	9878676545	mihir@gma...	nadiad	sdfs
5	NEEL	8456127548	NEEL1234@...	surat	we are 14 m...
NULL	NULL	NULL	NULL	NULL	NULL

#### 4. CONCLUSION

This research project was mainly focused on Location based virtual tour mobile application which enhances the tour guide system of place. The facts gathered were very interesting and useful for future developments in this area. Remarkable amount of literature survey was done using techniques like research papers, relevant books, web resources, expert human resources and written surveys. An important assumption made while developing the system was that the users have the basic idea about using an android mobile device and they are familiar with the English language. In order to use the location based services user needs to be in a place where the mobile device receives GPS data accurately. The system needs a better network connection for communication between the mobile device and the server. Otherwise it takes a long time to receive the data from database. The final outcome of this research project is very beneficial for the tourists. This mobile application is much more convenient than using a booklet since the tourists can easily install the application and use it without much difficulty. It replaces the traditional tour guides by providing important services for the tourists. being a popular tourist destination can benefit from this kind of applications, since most of the tourists prefer to use new technologies in their day to day life.

#### FUTURE WORK

The Future work for this system is to we are going to Artificial Intelligence to build a chatbot so it would be more interactive with user so by speaking user can fulfill their with chatbot if they have any query they can tell to the chatbot it will shows multiple suggestion to use.

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