

VIRTUAL TOURIST GUIDE

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Abstract: Tourism is travel for pleasure and also the business process. Tourism is one of the important and fastest growing industries. In the survey of 2019 around 39 crores domestic and 61 lakh foreign tourists visited Tourist places in Tamil Nadu. And there are around 55 tourist places in and around Tamil Nadu. But there are only less number of Tourist guide in Tamil Nadu. Now a days, there has been a consistently development in the quantity of individuals or persons out on visits, for the purpose of recreation, accommodation and entertainment. Main goal of this project is to help the tourists to know the all information about the particular tourist places and take full advantage of the visit without missing the main information and history. To guide tourist with respect to visit, there exist numerous applications are paper-based and Mobile based having restrictions of interactive visualization. By considering restrictions of existing applications, this system application provides a portable tour guide application with increased the augmented information to replace the traditional tour guide booklet. The application was developed based on the Android platform with augmented reality technology, and delivered as a mobile application.

Keywords: Tourism, Mobile Application, Visitors.

1. Introduction

This Mobile Application "VIRTUAL TOURIST GUIDE", aims to help the tourist to know more information about the visited place. Tourism is one of the important and fastest growing industries. To guide tourist, there are various types of tourist guide techniques available such as paper based tour guide, various tourism websites and mobile applications etc. Paper based tour guide system presents static photo copied images with limited information, so they have limitations of intelligent representation and precise navigation and it is traditional one. The problem with websites is that they increases users memory load. There are some mobile applications available for mobile tour based guide framework, it is as yet difficult that the system should recognize vast number of target images continuously with low computing power. To overcome from these problems the smart tour guide application was proposed. The application consists of mobile tour guide system with augmented information. The application will help the tourist to find the information about the required places and it will also provide the augmented view so that the interaction between the tourist and the place will be easy. The objective of this mobile application is to help and motivate tourists to visit different exciting tourist places in Tamil Nadu.

Tourist can easily understand where the place is, how the place is and he can visit that place whenever he wants. The objective of our framework is to give make a tour data to tourist at whatever time and anyplace in the event that they utilizes this application. Framework give tourists to have more in- formative and also interactive experiences by recovering virtual data cultural heritage image.

Our mobile application provides a guided tour utilizing location aware Augmented Reality technology. Augmented Reality (AR) is a technology which allows computer generated virtual imagery to exactly overlay physical objects in real time. AR creates the illusion that virtual, computer-generated objects exist in the real world, going beyond the static graphics technology where the graphics imposed do not change with the perspective. Development of the needed technology for AR systems, however, is still underway within the research community. This also eliminates the context switching between the real and virtual domains.

The mobile application is designed to operate in "Camera view". The camera view takes advantage of the built in camera of the mobile device. It scans the tourist place images and convey the information and history by voice over and how the place is in the video format using AR. The platform has an application programming interface that allows developers to contribute with different layers. Hundreds of new data layers are available to view on top of the camera viewer of the mobile device.

2. Literature Survey

1. Tourism is dependably the most grounded industry in the worldwide economy world that leading an approximated 11 percent of the world wide gross domestic product (GDP) and utilizing close around 200 million individuals and serving approximated seven hundred million overall tourists which is expected to almost double by the year 2020.

2. Recent developments of information and communication technologies allow tourists to get interesting information via the Internet during their trips.

Smartphones are mainstream in this area with active iOS and Android devices surpassing 700 million globally by now. Global Mobile data traffic is growing rapidly to an impressive share of 13% of the Internet traffic in 2012.

3. Tourism is one of the most significant industries in many countries and its importance is rapidly growing nowadays. To guide tourists, there exist various types of tour guide methods. Among them, paper-based tour booklets are the most commonly used ones to provide tour routes and heritage information for tourists.

3. Block Diagram

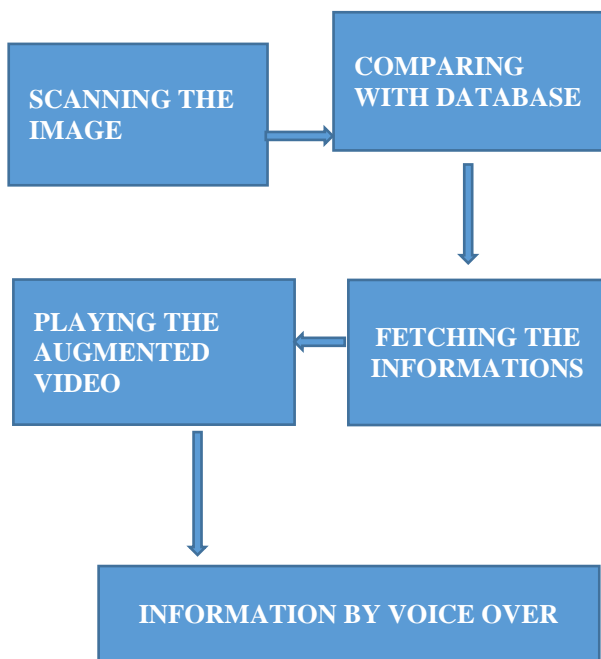


Fig 1. Flow of Virtual Tourist Guide System

4. Proposed System

The proposed system "VIRTUAL TOURIST GUIDE", aims to help the tourist to know more information about the visited place. Paper based tour guide system presents static photo copied images with limited information, so they have limitations of intelligent representation and precise navigation and it is traditional one. We propose the problem of developing a mobile application which helps to tourist by renders information about the monument or landmark just by taking their live pictures as inputs. In other word, the application should allow the user to click a photograph and based on the picture it should display and narrate the information and history about the monument or landmark. Therefore, we impose the 3D model to its real world counterpart and track the user's display to make the augmentation visible as shown in the Figure 3.1 . We also provide interactive visualization places as part of the AR interface.

5. Conclusion

This application has to be guided the tourists in the three phases: before the trip, during the trip, and after the trip. This work present the tour guide framework application using expanded reality such as augmented reality in mobile based environment to guide tourist for their tours. This system is capable to handling limitations of the current Computer Vision techniques that prevent the implementation of mature Augmented Reality applications. Till now visitor has to use different methodologies for their desired searches but our application consist of all feature on their fingertip.

6. Future work

In future, we are going to host it on Google store so all tourist can get benefit of our application. Better optimized Image and make application more robust and scalable. Working of translation feature for all the language of world.

7. Application

1. By using this application, user is able to get a visualization of the place before the visit.
2. This is an attractive feature for tourists which encourage them to actually visit the place.
3. The proposed system requires no human guide for tourist spots.
4. Tourists doesn't need any printed guide booklet to find out the path and any interesting information during the visit.

8. References

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