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Museum Guide

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Abstract: Ubiquitous computing is a concept in software engineering and computer science where computing is made to appear anytime and everywhere. In contrast to desktop computing, ubiquitous computing can occur using any device, in any location, and in any format. The process of investigating digital devices for the purpose of generating evidence related to an incident under investigation is referred to as Museum Guide. The motivation of this project is to detect crimes committed against people in which the evidence exists on a computer the system attempts to address whether or not evidence for events defined by the investigator is present in the document's collected from the suspect's computer. We propose a novel subject based semantic approach that clusters all the documents into a set of overlapping clusters corresponding to one unique subject of interest entered by the investigator.

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1. Introduction:

Ubiquitous computing is a concept in software engineering and computer science where computing is made to appear anytime and everywhere. In contrast to desktop computing, ubiquitous computing can occur using any device, in any location, and in any format.A user interacts with the computer, which can exist in many different forms, including laptop computers, tablets and term.

With the introduction of inexpensive portable devices that can render multimedia content, several projects have developed prototype or commercial systems for museum augmentation or navigation with handheld and wireless technologies. Technologies such as PDAs and pagers have provided a means by which museums can communicate with their visitors in a more personal manner. The visitor can then see the virtual image and learn more about them, principally in the form of audio content. In order to guarantee that most tourists can enjoy the stories behind artwork some tools are needed to help them browse the background and provide related information of exhibitions when they want to gain a deeper understanding about specific exhibition.

2. Existing System:

In this we will make an application that will be installed by the tourist. When the tourist reaches the particular landmark, the mobile app will scan the barcode and the information will be delivered to the tourist through audio and video. As the tourist scan the barcode all the information will be retrieve from the database where all the information will be stored. If the match occurs with information stored in the database the relevant audio chip will be played and the image will be displayed on the tourist screen. The tourist can select language according to their choice in which language they want to hear.

3. Proposed System:

The system proposed in the system is the application which will be helpful to the tourist or the people visiting the museum, the idea is to spread the proper knowledge of the monuments among people. It is to prevent abolishing history of the country or the legends that has made history. The idea also emphasises to make use of artificial intelligence in our life and to get knowledge. The user registersthemselves in the application with their proper knowledge and identity as soon as the user is registered they are allow to login into application.
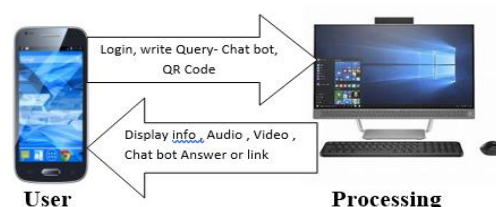
User can now scan the QR code on the monument as per he/she desire and can get the audio of the main headlines of the monument already saved in the database. Now user can get the detail information of the antic displayed in their personal device. User can ask the query through the chatbot and get to know better.

4. Software Requirements:

- **Java:** Java is a general-purpose computer-programming language that is concurrent, class-based, object-oriented, and specifically designed to have as few implementation dependencies as possible. Java language is used to build up the application.
- **SQL:**SQL is a domain-specific language used in programming and designed for managing data held in a relational database management system, or for stream processing in a relational data stream management system.Here, SQL is used to get data

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structured in the proper format and store data appropriately.

- **Operating Systems:** Android and Windows are the required OS for the application and their connectivity. As the system is an android-based application the platform needed for the application to run is the device with android platform. Windows OS in the computer as to make the server and to get the proper connectivity.

5. Hardware Requirements:

- **Computer:** Laptop/computer with 10GB memory free.
- **Mobile Device:** A mobile device of the user to run the application and analyse the result and performance.
- **Wi-Fi:** Wi-Fi router to enable wireless connectivity.

6. Working:

The flow of the system goes from registration of the user to the information gain by the user. User can view or run the application as per their wish, what are they interested in and what they want it. User can also query something or simply listen to the given information.

The actual working of the application starts from the scanning the QR code, as soon as the QR code is scan the data will be retrieved from the database and displayed to the user in their personal device. User can chat with the chatbot in the application or solve his/her query from the chatbot. User can watch video of the museum demonstration and view the full museum in one single video. At the end after all the knowledge gained by the user or tourist the user can happily logout. The working show below in the format of UML diagram.

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7. Test case of Museum Guide

Test case id	Check Item	Test case Objectives	Steps to Execute	Test data /Input	Expected result
Tc-1	Log-in-page	Log in with blank Fields	1.Username 2.Password 3.Phone no	Username:___ Password:___	Error "This Fields are required"
Tc-2	Log-in-page	Invalid user and password	1.Enter Invalid username 2.Enter Invalid password	Username:4567 Password:1234	Error "Invalid User"
Tc-3	Sign-up-page	Email checking	Email id:	Email: riyanair096@gmail.com	Error "Invalid Email id"
Tc-4	Sign-up-page	Password Checking	Password:	Password: kelly	Error "Password must contain 8 characters"
Tc-5	Add Momentum	Monument name: Monument detail:	Monument name: Monument detail:	Patient name: Mona lisa Doctor name: Chances are, one of the first paintings you might have thought of was the **Mona Lisa**.	Successful "Stored the record"
Tc-6	Date Field	Entered date of Birth is valid or not	Date: mm/dd/yyyy	Date: 04/07/2018	Successful "Stored the record"
Tc-7	Add Voice	Entered voice recording	Voice recording for the monument	Date: 03/07/2018	Successful "Stored the record"
Tc-8	Add data	Data on Chatbot	1.just select the question	1.Answer regarding your question.	Successful "Stored the record"
Tc-9	Data Field	Entered Data is valid or not	Data: "-------"	Time: 04:40	Error "Please enter valid Time"
Tc-10	Detail page		Click on detail button	1.detail about monument 2.Recording of the Monument 3.Chatbot	Details are visible or not.

8.Result

Outline of our mobile application

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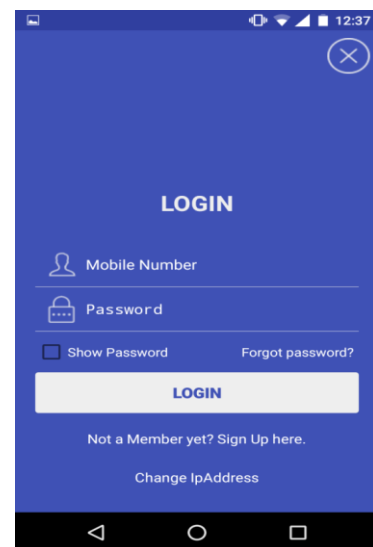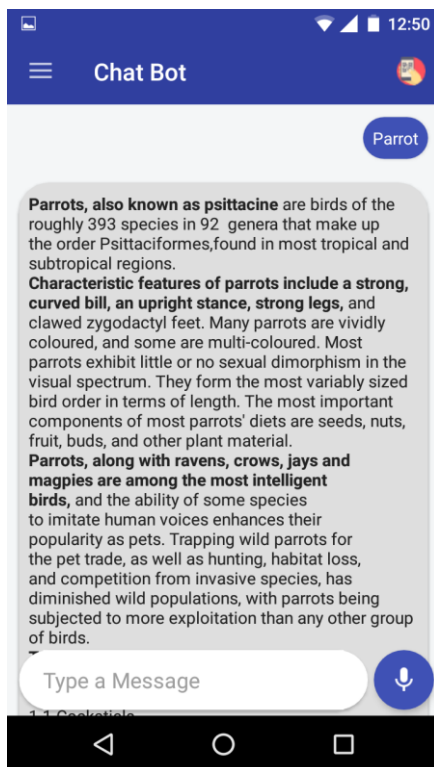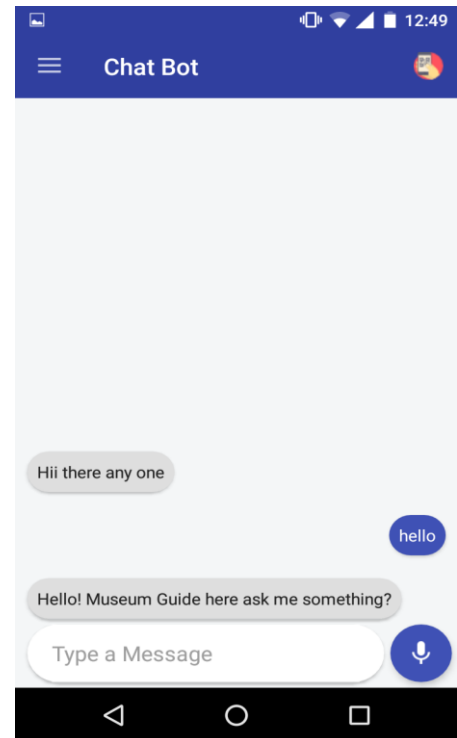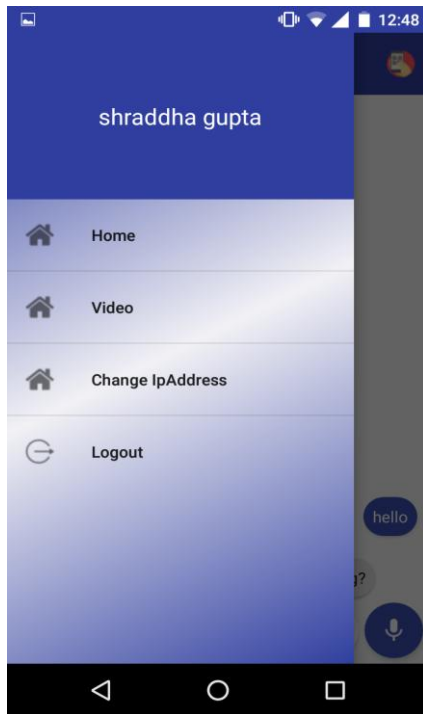
9. Conclusion

The project "Museum Guide" has been successfully completed and tested with the integration of the features of every software components for its development. Presence of every block has been reasoned out and placed carefully thus contributing to the best work of the unit. The project have been completed using very simple making it lightweight and portable. This helps tourists to gain more information in the premises of museum. We believe that our step is towards complete automated guidance system for tourists. Finally we can conclude our this project application gives a very good feature and there is huge scope for further residence

References:

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