NEC CHATBOT

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ABSTRACT: The college chatbot project is built using artificial algorithms(NLP) that analyses user's queries and understand user's message. The Chatbot is an application which provides the answer to the queries of the student and other users. They just have to query through the chatbot which was used for chatting. The user can interact with chatbot through any languages. We can convert that language to English using language converter. The User can query about college-related activities through the chatbot application. The users did not personally go to the college for queries. The System analyses the queries and then answers to the user. The system replies using an effective (GUI) Graphical user interface which implies that as if a real person is talking to the user. The user can query about the college-related activities such as date and timing of annual day, sports day and other cultural activities, etc., through online with the help oh this application. This application helps the students to be updated about the college activities. It provides users with 24/7 assistance through our chatbot application.

I. INTRODUCTION

Chatbots or conversational interaction as they are also known presents a new way for individuals to interact with computer systems. Traditionally to get an answer to the question by a software program involved using filling out a form or using a search engine. A chatbot allows a user to ask any questions in the same manner that they would address a human. Nowadays the most well-known chatbots are voice chatbots: Siri and Alexa. However, chatbots are currently being adopted at a high rate of computer chatbot platforms. The technology at the theme of the rise of the chatbot is (NLP) natural language processing. The recent advances in machine learning (ML) have the greatly improved the effectiveness and accuracy of a natural language processing, making chatbots a viable option for many organizations.

A simple chatbot application can be created by loading a (frequently asked questions) FAQs into the chatbot software. The functionality of the chatbot application can be extended by integrating it into the association's or other organization's enterprise software, allows you to more personal questions to be answered, like"What is my position in my office?", or "What is the status of my project?".Most commercial chatbots are dependent on platforms created by the technology giants for their natural language processing. These include Amazon Lex, Microsoft Cognitive Services, Google Cloud Natural Language API, Facebook DeepText, and IBM Watson. Platforms, where chatbots are deployed include Facebook Messenger, Skype, and Slack, among many other.

II. LITERATURE SURVEY

- 1) Bhavika R.Ranoliya and Sanjay Singh," Chatbot for university-related FAQs", IEEE Conference Publications, Sep 2017. It provides an efficient and accurate answer for any query based on the dataset of FAQs. Artificial Intelligence Markup Language(AIML).
- 2) Dungeon Lee and ho-JinChoi," A counselling service using emotional response", IEEEConference Publications, Feb 2017. The system understands the content of conversation based on recent natural language processing (NLP) methods with emotion recognition. It senses emotional flow through the continuous observation of conversation.
- 3) Chi-Hwan Choi and Jin-Hyuk Kim," Smart answering chatbot based on OCR and overgenerating Transformations", IEEE Conference Publications, March 2016. The system was answering questions through the use of electronic documents integrated with the simulates system. Extracts texts using Optical Character Recognition (OCR) from files, then generate questions via Overgenerating Transformations and Ranking algorithm.
- 4) Sameera A. Abdul and Johnwoods," Question answer System for online feedable newborn chatbot", IEEE Conference Publications, March 2018. Extracting data from web pages needs considerable processing before the response sentences are ready for the Chatbot.AIML(Artificial Intelligence MarkupLanguage) was designed for the creation of a conversational robot.

III. PROBLEM STATEMENT

Chatbots are commonly used in virtual assistant for many private corporations like Google, Amazon, Microsoft and Apple. Their purpose was to simplify the communication: reducing the needed time to written(type) on the search engine, press search and check out the results. Also, to give the impression to the users that they are provided by the human touch. Chatbots are used to solve some business tasks across many industries like Commerce, Insurance, Banking, Healthcare, Finance, Legal, Telecom, Retail, Auto, Leisure, Travel, Sports, Entertainment, media and many others. In our application, we implement this in our college for the educational purpose. Students do not go anywhere to search for college details as well as placement details. It reduces man-power for answering the questions.

PROPOSED SYSTEM

A Student chatbot project is built using artificial algorithms that analyzes user's queries and understand user's message. This System is a mobile application which provides answers to the query for the student. Students just have to queries

through the chatbot which is used for chatting. The students can chat using any format there is no specific format. The System uses built-in artificial intelligence algorithms to answer the queries. The answers are appropriate for the user queries. The admin can view invalid answer through portal via login. The User can query any college-related activities through the system. The user did not have to personally go to the college for getting information. The system analyzes the question and then answers to the user. The system answers to the query as if it is answered by the person. With the help of artificial intelligence, the system answers the query asked by the students. The system replies using an effective Graphical user interface which implies that as if a real person is talking to the user. The user can query about the college-related activities through online with the help of this mobile application. This system helps the student to be updated about the college activities.

PROJECT MODULES:

- Login Module
- Administrator Module
- Execution Module

1. LOGIN MODULE:

The user enters their details like user name and mobile number for creating an account. When the user tries to enter the same details, the database notifies the message to the user. After a user creates a login successfully then the start to chat with the chatbot. The user can update their details such as user name and mobile number in chatbot and user can also delete this account by entering this mobile number.

2. ADMINITRATOR MODULE:

The user can enter their details such as user name and mobile number for creating an account with a chatbot, and their details that are stored in the database SQLite3. When the user tries to enter the same details, then the database notifies the message to the user. After the user creates a login successfully, then they start to chat with the chatbot through messaging channel. The user updates this details such as username and mobile number in chatbot and user can also delete this account by entering this user name. These types of details are managed by the administrator. The administrator can update the college-related details are in the database.

3. EXECUTION MODULE:

The user can enter their query about the college details such as when the college opening day? Where is the location of the college?, etc. The query will pass to the chatbot with the help of a messaging channel. Then chatbot sends the message to NLP(Natural Language Processor). Then the Natural Language Processor, it processes the query related answers from the database. The Natural Language Processor defines the intents that are, forms the same questions and answers to reply to the relevant answers to the query. It also extracts the entities and split the words to answer the questions. The responses sent to the user with the help of the messaging channel. For example, if the user enters the query such as "where is the location of the college?". The users query will

differ from their understanding. So the Natural Language Processor will identify the keyword to reply the answers through a messaging channel. Keywords and the answers are stored in a database. The user queries are retrieved from the key and answer value from the database.

IMPLEMENTATION:

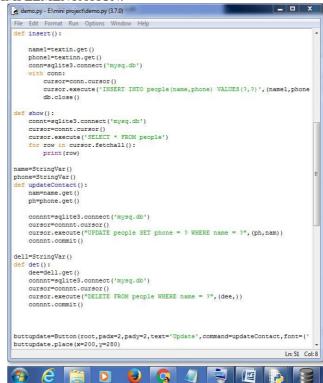


Fig:1.1 Screenshot For Login Code

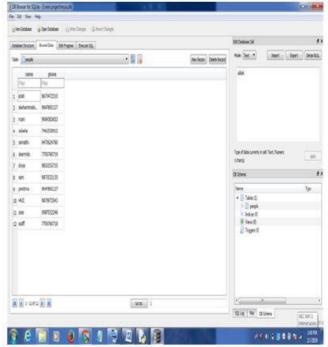


Fig:1.2 SQLite3 database connectivity



Fig:1.3 Login into Chatbot Account



Fig:1.5 Update User Details into Chatbot Account



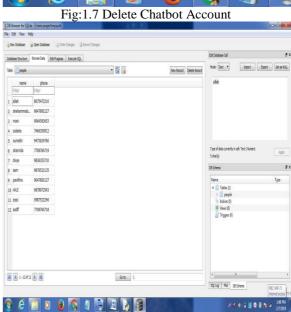


Fig:1.2 Delete User details from SQLite3 database

IV. CONCLUSION

The ultimate goal of the project is to develop an algorithm that will be used to identify answers related to user-submitted questions. To develop a database where all the college-related data will be stored and to develop a web interaction. The web interaction developed had two parts, one for simple users and one for the administrator. Background research takes place, which included an overview of conversation procedure and any relevant chatbots available. A database was developed, in which store the information about queries, answers, keywords, logs and

feedbacks. A usable system was designed, implemented and deployed to the web server on two occasions. The evaluation takes place from the data collected by students of the University and also after received the feedback from the first deployment, extra requirements were included and implemented.

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- [4] https://www.sololearn.com/Discuss/248882/ how-can-i-code-anbot- texts-like-natasha-on-hike-or-bots-on-facebooks-i-want-tocode-exactly-like
- [5] https://www.zeolearn.com/magazine/10-steps-for-gettingstarted-guis-with-python