COLLEGE ENQUIRY CHATBOT SYSTEM (DMCE)

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Abstract - *Agents that interact with human in way of conversation are known as ChatBots. Chatbots pass the turing test. The main aim to build the chatbots that resolving the queries of the user. It's is done using Natural processing language, which analyze the user query and extracts the indents from it. After this the response gets generated and with the help of AIML i.e. (artificial intelligence markup language) the response gets displayed.*

Key Words: **AIML, UI, AI, Database, Chatbot.**

1. INTRODUCTION

This System is a mobile application which provides answer to the query of the student. The query of the Students is generally a chat. The chat is done in any manner, there is no particular format declared for chatting with the bot. The main goal is to reduce the job of the students to personally visit the college. The system provides information about college related activities. The system consists of graphical user -friendly interface. System uses A.I. and M.L. for solving the queries. The user can ask questions related to college related activities such as date and timing of annual day, sports day, and other cultural activities.

2. Theory

Traditionally, the chat bot system was not well-known to people who are not more into the technology field. Even if there exist a chat bot system, it is not much accurate in proving the answer or solutions. Students need to manually visit to the college to get their queries answered by the college help desk. This process consumes lot of time to visit college if its miles away from home. The idea behind the college chatbot is inspired from google assistant which will answer queries of student through a web application. It provides links for the query asked by the user. On visiting the link, the user gets solutions about the query.

The chatbot works on a general algorithm to extract information and exhibit chat between the human user and the bot. It resolves queries regarding the college activities such as result, timetable, important notices, placement notices etc. The algorithm usually detects the intents i.e. keywords.

3. *Proposed System and Components:*

3.1 *System Overview*:

In our College Chatbot System, we have designed a Chatbot using Android programming. We have also used Java for designing our app College Enquiry Chat Bot project will answer to student questions that is related to college. First bot analyses user's queries and understand user's message, based on bot knowledge bot provide answers to the queries of the students. Students will just have to select the category for the department queries and then ask the questions to the bot that will be used for chatting. Student can query related to admission, faculty details, etc. Students don't have to go to the college or contact the faculty to make the enquiry. If any new candidate enquirers for admission and the details about any department of the college this bot will help to get the answer of query of the candidate and even while getting the answer the bot will read out the answer to the candidate.

3.2 Web API:

When the concept of web development is used an API comes into picture defined as a set of specifications, such as Hypertext Transfer Protocol (HTTP) request messages, along with a definition of the responses messages as the structure, usually in an XMLie Extensible Markup Language or JavaScript Object Notation (JSON) format. As the name suggest that web api is an api over the web that can be accesed using an HTTP protocol Using different technologies we can build api, some of them are Java,.NET(dotnet).The ASP.NET api is an extensible framework for building services based on HTTP that can be accesed in various platforms such as windows, web and mobile.

4. *Functionality*:

Figure 1 Explains Working Diagram for College Chatbot System that we have implemented. The implemented model is capable of performing the following operations:

• *Online Notice Board*

• *Text Notices*

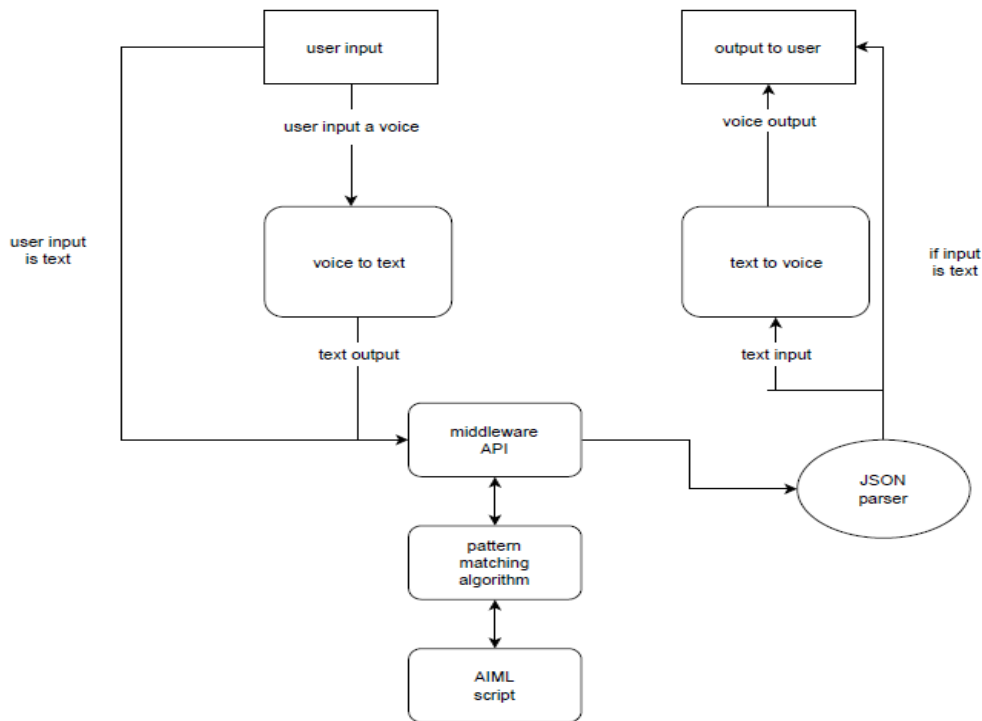• *PDF / HTML Notices can be displayed in the systems*

Figure 1

Figure 2 as shown blow gives the detail idea about idea of the end user interface of the Chatbot. The chatbot reply is show in the figure 2.

Figure 2

Figure 3 given below shows the reply of the chatbot of the user query as here the user asked about the timetable following is the result or the reply by the chatbot.
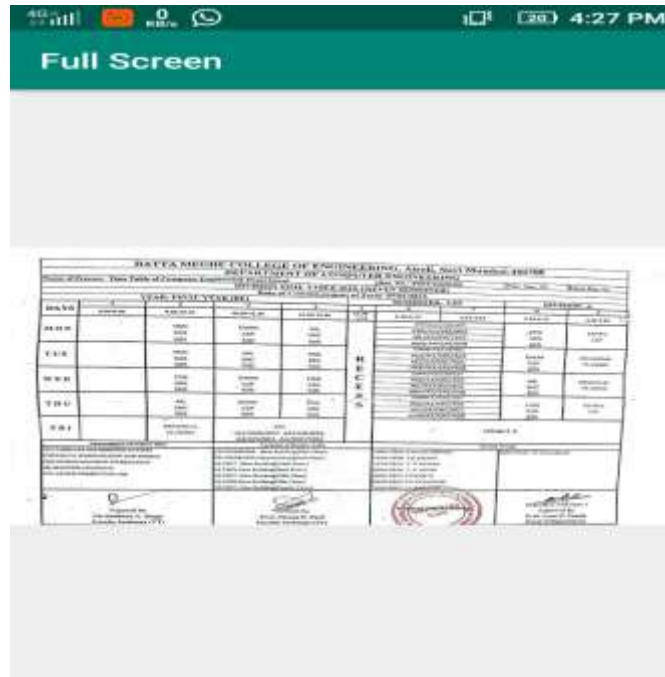

Figure 3

5. ALGORITHM:

The general idea of working of proposed system algorithm is given as follow:

Step 1: Start.

Step 2: Get the user query. (INPUT)

Step 3: Pre-processing of the query E.g. suppose there is this query "what are the subjects for CSE first   year" So, we are going to remove these stop words like „is", „the" using pre-processing technique.

Step 4: Now the step is to fetch the keyword from the query

Step 5: With the help of the keyword matching algorithm the keywords are matched with keywords in the database or knowledge base.

Step 6: Output to the user will be the response of the user entered query.

Step 7: Exit.

6. Related Works

1. Eliza

ELIZA is an chatbot that uses natural language processing for query response created from 1964 to 1966[by] Joseph Weizenbaum at MIT Artificial Intelligence Laboratory to demonstrate the superficiality of communication between humans and machines. Eliza simulates the conversation by using a 'keyword matching' and substitution methodology that gave users an illusion of understanding on the part of the program. Directives on how to interact were provided by 'scripts', written originally in MAD-Slip, which made ELIZA to understand the user query and engage following the rules and directions of the script.

2. Google Assitant

Google Assistant in an AI powered virtual assistant developed by google that understands the user query an provide the response to the user's query. It also provide the feature of voice input and output i.e the user can query through voice.

7. Conclusion:

In this paper, we have implemented an chatbot which will provides solution to the student's queries. The field of A.I. and M.L The chatbot can answer only those questions which it has the answer in its database. So, to increase the knowledge of the chatbot, we can train the bot so as to get the response to the maximum queries. To increase probability of output the bot should be traines properly. The bot provides whole information about the result of students of all Department, timetable, various notices, event information, Campus information,..etc. are used to develop and emulate responses. This responses are gets enchanced by time and training of the bot. The bot works online. The future work can be if the bot is unable to provide the response to the user query then the user query is stored in the database, so as to add the response in further. So in this way we have implemented an automated response generation system.

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