

Chat Bot For College

Miss. Sonali Chavan¹, Miss. Komal Harmale², Miss Akshata Shejwal³, Mrs. Sawant G.N⁴

^{1,2,3} Dept of computer engineering

⁴ Assistance professor, Dept of computer engineering

^{1,2,3,4} Rajendra Mane College Of Engineering & Technology, Ambav, Devrukh Mumbai, University, Maharashtra-415804, India

Abstract- Artificial intelligence ChatBot is a technology that makes interaction between man and machine possible by using natural language. This system is web application which provides answer to the query of the student very effectively. In traditional system if the student want to get some college related information then he/she would have to visit the college website. But sometime it is not possible to get detailed information. For that purpose we developed the chat bot. This system takes input from user. Then clustering keyword matching algorithm is used to divide the query in smaller clusters and which are then matched with the keywords present in database. Then Levenshtein Distance algorithm is used for finding minimum distance between two keyword and according to that it generates output. If the keyword cluster is not satisfied then query is rejected. The input is taken as textual format, according to input intelligent system process the query and give response to user in textual as well as in voice format. This system may help students to get college related information quickly. The system also produces the output in voice format that enhances the user interest.

Keywords- Artificial intelligent, Data mining, keyword matching, clustering, Levensthein Distance.

I. INTRODUCTION

A chatbot is a computer program using which conversation between man and machine is possible. There are so many reasons behind developing the chatbot. Chat bot are use in education system for enquiry purpose. Alice is best example of such chatbot. Another example of chatbot which is used in business for communication purpose where only one person can communicate with one person at a time, to make it possible to communicate with hundreds of people at same time chatbots can be used. No matter what time of the day it is or how many people are contacting you, every single doubts or queries will be answered immediately. Since ChatBot are basically virtual robots they never get tired and continue to obey your command. They will continue to operate every day throughout the year without a break. Chatbot have the benefit that it can easily be used in any industry. Unlike other products where you have to do a lot of development and testing to change platforms, Chatbot are relatively easy to switch. Customer satisfaction in this system is more as

compared to the human centric system, if we use chatbot then it is cost effective also people could use Bots as personal fashion advisor for clothing recommendations, or ask trading tips from a finance bot, suggest places to visit from a travel bot.

II. LITERATURE SURVEY

This are the some references we use for our project the first chat bot was developed by Eliza in 1966 for making conversation between man and machine possible using natural language processing. It simply uses input rules, keyword pattern and output rules according to it will display result. Another important aspect of modern eliza system is use of synonyms. the use of synonyms extends eliza's capabilities and allows it to deal with variety of input with simplified keywords and rule set this because each time a synonyms is encounter, it is replace with common words[2].

A.L.I.C.E(Artificial linguistic internet computer entity) is chatbot developed by Dr.wallace during 1995-2000 which is based on natural language understanding and pattern matching[3].

Another chatbot is smarter child was an intelligent agent or bot developed by Active buddy in 2001 that would be chat with plain english. It gives quick data access and fun personalized conversation[4].

survey of Chatbot design techniques in speech conversation between the human and the computer is presented. The speech is very powerful communication between human; hence, Speech interaction with modern networked computing devices has received increasing interest in the past few years with contributions from Google, Android and IOS. Because they are more natural than graphic-based interfaces, spoken dialogue systems are beginning to form the primary interaction method with a machine[4].

III. PROPOSED SYSTEM

The aim of this project is to contribute to the solution of the problem of direct communication between user and the college.

The main modules of the project are as follows:

Database:

To develop a database were all the relevant information about questions, answers, keywords, logs and feedback will be stored.

Responding:

When user asked any question then keyword matching algorithm is use to identify keyword in sentence. After that clustering algorithm is used to divides the data into groups that are similar. For finding the minimum distance between two keywords Levenshtein Distance algorithm is used.

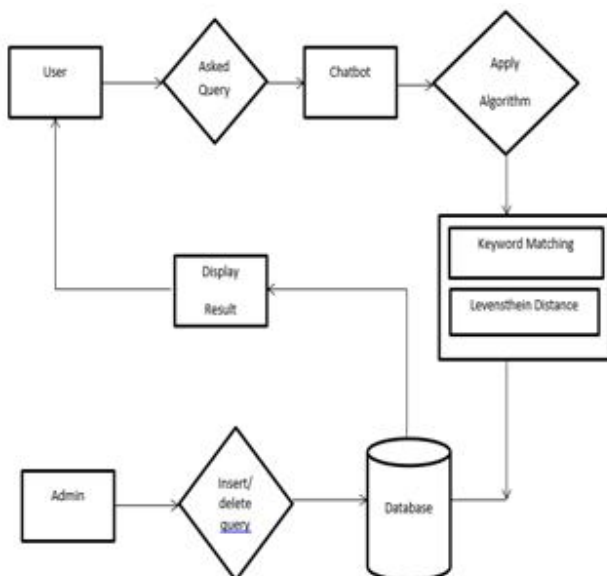
Admin:

Admin objective is to perform insert, delete operation on database, also it accept related query from user which is not present in system and hence it get updated.

User:

Users just have to put their query to the bot which is used for chatting.

Architecture of Chatbot System



This is the architecture of our system. In this system will take input from user after processing it display output to user. Admin has a authority to feed college related information in database.

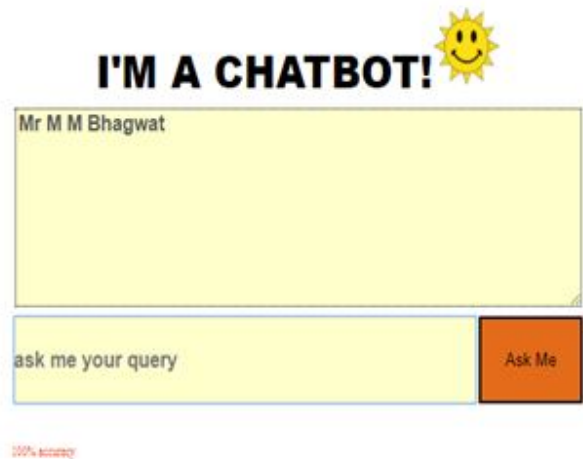
IV. RESULT ANALYSIS:

Home page



This is the homepage of our project .In thison right side of homepage there is login option which is uses admin only. there is no need for student to register in our site they directly communicate with the chatbot. On left side FAQ,contact us and feedback options are available using that users can gives feedback, if any errors occurs while using this chatbot in such case they can contact to college using available college information.

User Home Page:



This is a chat bot interface using which user can asked any college related information. when user ask any question then system will process that query by using some algorithm. First clustering divides that query into smaller part. then keyword matching algorithm check for the keyword match if keyword matches then Levensthein distance algorithm uses for finding minimum distance between that keyword and according to that system display the result to user.

Admin Home Page



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This is the admin page of our system using which admin of college or any higher authority member can feed new college related informations.so student can stay updated with college related activity .also the question search by student which information not present in chatbot such question are padded at admin side.thatquestion admin check whether they valid or not if they valid then feed answer of that question in database otherwise reject such question.

IV. CONCLUSION AND FUTURE SCOPE

Conclusion

The proposed system is an intelligent system which think like human beings. This system takes input in textual format and provides output in text as well as in voice format so it is beneficial for user or student who is willing to communicate with college. Thus this system will give quick answers to the questions asked by the student.

Future Scope

In future work of this project we can include voice based queries i.e., in this system it includes only voice based output and in future it could also be used it to take voice input

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