



# A Review on College Enquiry Chatbot

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## Abstract:

This paper presents the design and development of an intelligent voice recognition chat bot. The paper presents a technology demonstrator to verify a proposed framework required to support such a bot (Android Application). Chatbot can be described as software that can chat with people using artificial intelligence. These software are used to perform tasks such as quickly responding to users, informing them and helping them solving their queries. In this paper, we present the general working principle and the basic concepts of artificial intelligence based Chatbot to ease our College Information Retrieval System. Our Chat-bot could effectively answer college related queries with an added advantage that it also provides personal info like grades, etc.

## I. INTRODUCTION

The system replies using an effective Graphical user interface which implies that as if a real person is talking to the user. The user just has to register himself to the system and has to login to the system. After login user can access to the various helping pages. Various helping pages has the bot through which the user can chat by asking queries related to college activities. The system replies to the user with the help of effective graphical user interface. The user can query about the college related activities through the application. The user can query college related activities such as date and timing of annual day, sports day, and other cultural activities. This system helps the student to be updated about the college activities. The proposed system will also have an online notice board. On this notice board, any Text notices or PDF documents can be displayed. This will help the user to be updated with the important notices. The user to search for the important notices will waste not much time. The answer to the query will be answered on the basis of the user's queries and the knowledge base. The important keywords will be fetched from the keywords and the answer to those keywords will be searched in the knowledge base. If the match is found, the relevant answer will be provided to the user or the default message will be shown to the user that "Answer to this query is not available at the moment, please revert back after some time". The "Keyword Matching" A chat bot (also known as a talk bot, Bot, chatterbox, Artificial Conversational Entity) is a computer program, which conducts a conversation via auditory or textual methods. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner, thereby passing the Turing test. Chat bots are typically used in dialog systems [1] for various practical purposes including customer service or information acquisition [2]. Chat bots are often integrated into the dialog systems of, for example, automated online assistants, giving them the ability of, for example, small talking or engaging in casual conversations unrelated to the scopes of their primary expert systems. College Enquiry Chat Bot project will be built using artificial intelligence algorithms that will analyze user's queries and understand user's message. This system will be an Android application, which will provide answers to the queries of the students. Students will just have to select the category for the department queries and then ask the query to the bot

that will be used for chatting. Artificial intelligence will be used to answer the student's queries. The student will get the appropriate answers to their queries. The answers will be given using the built in artificial intelligence algorithms. Students will not have to go to the college to make the enquiry. Algorithm will be used to match the keywords from the knowledge base in some cases user may find out that the answer given to his/her query is not relevant. In such cases, the user can mark this answer as Invalid, and an instance of this invalid answer will be sent to the Admin panel at the same time. Whenever Admin will log in, he will get to see the answers which are marked invalid and then he can do the necessary changes to the knowledge base so that user will get the proper result when he will ask the same query next time. The aim of our Proposed System is to develop an Android based bot Application, which provides answer to the query of the student very effectively. Students just have to put their query to the bot, which is used for chatting.

## II. LITREATURE SURVEY

Eliza is considered as the first Chatbot, which works on the pattern matching system. It is developed by Joseph Weizenbaum in 1964. ALICE is rule-based chatbot based on the Artificial Intelligence Markup Language (AIML). It has more than 40,000 categories, where each category has combination of pattern and its response. Md.Shahriare Satu and Shamim-AI-Mamun showed the review of applications of the Chatbot which are developed using the AIML scripts. They said that AIML based chatbots are easy to implement, they are lightweight and efficient to work. Their paper gives the detailed information about the different applications of the chatbots. Thomas N. T. and Amrita Vishwa designed an AIML and LSA based chatbot to provide the customer care service over the E-commerce websites. Their approach shows we can improve the chatbot ability by adding other models to it. In android operating system, we can implement the chatbot using the various approaches. One of the approaches is shown by Rushabh Jain and Burhanuddin Lokhandwala in their Android based Chat-Bot paper. Emanuela Haller and Traian Rebedea, "Designing a Chat-bot that Simulates and Historical Figure", IEEE Conference Publications, July 2013. There are many applications that are incorporating a human appearance and intending to simulate human dialog, but in most of the

cases, the knowledge of the conversational bot is stored in a database created by a human experts. However, very few researches have investigated the idea of creating a chat-bot with an artificial character and personality starting from web pages or plain text about a certain person. This paper describes an approach to the idea of identifying the most important facts in texts describing the life (including the personality) of an historical figure for building a conversational agent that could be used in middle-school CSCL scenarios. Maja Pantic, Reinier Zwitserloot, and Robbert Jan Grootjans, "Teaching Introductory Artificial Intelligence using A simple Agent Framework", IEEE Transactions on Education, Vol. 48, No. 3, August 2005. This paper describes a flexible method of teaching introductory artificial intelligence (AI) using a novel, Java-implemented, simple agent framework developed specifically for the purposes of this course. Although numerous agent frameworks have been proposed in the vast body of literature, none of these available frameworks proved to be simple enough to be used by first-year students of computer science. Hence, the authors set out to create a novel framework that would be suitable for the aims of the course, for the level of computing skills of the intended group of students, and for the size of this group of students.

### III. MOTIVATION

As students, we require many types of information regarding our college and university during our course. Sometimes getting this information is rather cumbersome and lengthy. Like getting information regarding our fees structure or the due fees remaining is a very lengthy process we have to go to administration building and find the correct window and then look for a no dues form then fill it with correct data and then submit it to the appropriate person and then that person will tell us our due fees. This is all long, hectic and unnecessary. We live in an age of computer science, where automation and simple procedures are easy to achieve. So why have this long and unnecessary process to get this trivial information. We as a computer science student are always looking forward to solve the problems around us using the technology that we learn and how to implement them to achieve ease of usage in real life. This is where we thought of using an intelligent voice bot delivering these information's. Think about an application, where all you have to do is ask. You want fees status of a student, just ask the voicebot about is it clear or not it will tell you. No need to get into lengthy and hectic procedure. You want to know the process of filling the university exam form, no problem our bot will tell you the steps. It can also solve the dilemma when a student is about to join the college. He/she may want to enquire about fee structure of various colleges and know their admission procedure. Now in the current system it can be a long process. You would have to go to various college sites and then check it. Then our voicebot can do it for you in seconds all you will have to do is to ask it. Isn't it easy and convenient?

### IV. PROJECT SCOPE

University Information Enquiry voicebot project will be built using artificial intelligence algorithms that will analyze user's queries and understand user's message. This system will be a web application which will provide answers to the queries of the user. Users will just have to ask the query to the bot that will be used for chatting. Artificial intelligence will be used to answer the users' queries. The user will get the appropriate answers to their queries. The answers will be giving using the

built-in artificial intelligence algorithms. Students will not have to go to the college to make the enquiry. In some cases, user may find out that the answer given to his/her query is not relevant. In such cases, the user can mark this answer as Invalid, and an instance of this invalid answer will be sent to the Admin panel at the same time. Whenever Admin will log in, he will get to see the answers which are marked invalid and then he can do the necessary changes to the knowledge base so that user will get the proper result when he will ask the same query next time. The aim of our Proposed System is to develop an Android based bot Application, which provides answer to the query of the student very effectively. Students just have to put their query to the bot which is used for chatting.

### V. CONCLUSION

The Main Objective of the project is to develop and algorithm that will be used to identify answers related to users submitted questions. The need is to develop a database where all the related data will be stored and to develop a web interface. The Application developed will have two part one for simple user and one for the administrator. A background research took place, which included an overview of the conversation procedure and any relevant chat bot available. A database will be developed, which will store information about queries, keywords, logs, and feedback messages. Results have found that the application developed is able to correctly fulfil its purpose within a short time period. Our result show that the total time required to perform all the task, including visit to the college, standing in queue, and enquiry are reduced with the help of our system

### VI. REFERENCE

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