# AI and Web Based Human Like Interactive College Chatbot (Unibot)

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Abstract: During the admissions process or in accordance with their requirements, students are sometimes required to visit universities or colleges to get information about various topics such as tuition fees, term schedules, etc. daily requirements It takes a lot of time and effort to complete this process, and it also needs staff to give visitors the information they need. A chatbot can be created as a result to solve the issues. The idea revolves upon user-chatbot interaction, which can be accessible from anywhere at any time. With a few straightforward language conversions, the chatbot may be quickly added to any university or college website. A chatbot offers a variety of information about schools, including information for pupils. Anybody can utilise the chatbot. The project makes use of machine learning and artificial intelligence.

**Key Word**: Artificial Intelligence; Chatbot; Human like interactive; Machine Learning; College Chatbot.

#### **I.INTRODUCTION**

Instead of offering direct contact with a real human agent, a chatbot is a software application that is used to conduct an online chat conversation using text or text-to-speech. designed to accurately mimic how a human conversation partner would act. Artificial Intelligence Mark-up Language (AIML), a language based on XML that enables developers to specify rules for the bot to follow, can be used to design bots. Another problem is that it takes a lot of time to establish rules for various scenarios, and it is difficult to define rules for every conceivable case. According to these bots can manage simple inquiries but struggle with sophisticated ones.[4] In the chat-bot system is suggested, created, and incorporated into Face book page utilizing Chat Fuel platform[1].

The chatbot was created to give students the impression that they are conversing with college officials, and it answers their questions using conversational text. The user can get responses in text, image, and many other formats thanks to the chat fuel's characteristics. The setup AI feature makes the bot intelligent and responds to customer inquiries.

This project's development is built on an intellectual chat-bot system that will handle academic tasks including admission inquiries, fee schedules, scholarship information, departmental timetables, and information on the documents that must be attached, among other things. The learner will find it simple and quick to get immediate answers to their questions with our chat-bot technology.

## **II.LITERATURE SURVEY**

A thorough overview of prior research on a subject is a literature survey. The literature review examines scholarly books, journals, and other sources that are pertinent to a particular field of study. It need to provide a theoretical framework for the study and assist you (the author) in defining its scope. A chatbot system for college inquiries that was created using AI algorithms was developed by Prof. Ram Manoj Sharma [1]. The bot interprets user messages and analyses user queries. The system includes modules such as online chatbots and notice boards, among others[1].

In order to create responses to queries, P. Nikhila, G. Jyothi, K. Mounika, Mr. C. Kishor Kumar Reddy, and Dr. B. V. Ramana Murthy [2] created utilising AIML (Artificial Intelligence Mark-up Language). Alicebot, a chat-bot programme supported by ALICE free code, is created using AIML or customised using AIML [2].

A chatbot was created by Harsh Pawar, PranavPrabhu, Ajay Yadav, Vincent Mendonca, and Joyce Lemos [3] utilising knowledge from a database. The suggested system includes an online inquiry and chatbot technology. A user-friendly graphical interface is developed utilising a variety of programming languages to send and receive responses. The primary objective is to match patterns stored in the application using SQL (Structured Query Language) [3].

Using NLP (Natural Language Processing), which may be done in two ways—the first via written text, and the second by verbal or **voice** communication—Nitesh Thakur, AkshayHiwrale, SourabhSelote, AbhijeetShinde,and Prof. NamrataMahakalkar presented an artificial chatbot. Verbal communication is far more difficult than written communication. The interest in some newly developed understanding and processing speed capabilities for evolving speed in virtual human

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dialogue systems is introduced in this research [4].

#### **III.METHODOLOGY**

**On-Line:** Enquiry Students will ask questions about services and concerns related to tests, coursework, pricing structures, etc. Even questions about the college's social and cultural events are acceptable from students.

**On-Line Chatbot**: The user may be presented with the outcome in text or card format. The question will be answered based on the queries put forth and the media generated in response. Users can ask the chatbot questions about the college at the time of admission or about any competitions hosted there.

## The basic rule which will be enforced for operating of this planned system is as follows:

- Step 1: Start.
- Step2: Get the input question from the user.
- Step 3: The question is pre-processed.
- Step 4: Fetch the remaining keywords from the question.
- Step 5: Match the fetched keywords with the keywords in knowledge base, and supply an acceptable response.
- Step 6: Further the database module is employed to call correct services using entity data to seek out correct information.
- Step 7: The keywords are matched with the assistance of keyword matching algorithm.
- Step 8: It returns the question response to the chatbot.
- Step 9: Chat-bot packages the info into correct response for display by the client.

#### **Available Technology**

Bots that communicate with people using natural language are known as chatbots. In many organisational settings where they can take the role of people, chatbots are deployed. However, chatbots are most widely used in the e-commerce industry to automate customer support. Chatbots significantly reduce human work while also enhancing consumer connections[6].

Here are a few current systems: The main chatbot developed by Joseph Weinbaum using a keyword coordinating method is called ELIZA. The idea was to convince the customer information and search for specific phrases; if a catchphrase was found, the proper response was recovered. In the absence of a catchphrase, ELIZA would move forward in accordance with the suggested guidelines to continue the conversation by asking the customer for more information.

One of the earliest attempts to create an AI through communication with humans was Jabberwocky.[6]It served mostly as entertainment. It planned to switch from a text-based system to one that was entirely voice-operated.

Richard Wallace created ALICE in 1995. It makes use of design coordination and keeps the data in records written in Artificial Intelligence Mark-up Language. Similar to an XML file, an AIML record is used to contain design data for chatbots. An example of a conversation between a person and ALICE is provided in Code 2.

A question-answering (QA) computing system called Watson was developed by IBM with the goal of applying cutting-edge machine learning, automated reasoning, information retrieval, knowledge representation, and natural language processing techniques to the field of open domain question-answering.[6]

The Amazon Echo gadget is home to the voice service Alexa. For voice interactions, Alexa employs natural language processing techniques. These algorithms enable her to hear, recognize, and react to speech orders.

## **IV.CONCLUSION**

Rosuvastatin We can make our chatbot for college inquiries more interactive in a variety of languages for users in various locations in the future. For those who are unable to read or type, we can add speech-based questions and answers. The future chatbot should offer the student or parent's dilemma both an answer and a solution.[7] The College Enquiry Chatbot should offer information on college accomplishments, placements, and scholarships in addition to admission-relateddata.

This chatbot's primary goal was to create an algorithm that could recognize user inquiries or requests and provide the appropriate response.[7] to create a database where all pertinent information is kept and linked with inquiries as they are made. We were successful in creating a chatbot that allows students or parents to ask questions about the application process, course information, eligibility requirements, or admission.[7] The chatbot evaluates the query and responds appropriately.

# References

- [1]. Assistant Prof Ram Manoj Sharma, "Chatbot" based College Information System", RESEARCH REVIEW International Journal of Multidisciplinary, ISSN: 2455-3085 (Online), Volume-04, Issue03, March-2019, pp 109-112.
- [2]. P.Nikhila, G.Jyothi, K.Mounika, Mr. C Kishor Kumar Reddy and Dr. B V Ramana Murthy on , "Chatbots Using Artificial Intelligence", International Journal of Research and Development, Volume VIII, Issue I, January/2019, ISSN NO:2236-6124, pp 1-12.
- [3]. Harsh Pawar, PranavPrabhu, Ajay Yadav, Vincent Mendonca, Joyce Lemos, "College Enquiry Chatbot Using Knowledge in Database", International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653; IC Value: 45.98, SJ Impact Factor: 6.887, Volume 6, Issue IV, April 2018, pp 2494-2496.
- [4]. Nitesh Thakur, AkshayHiwrale, SourabhSelote, AbhijeetShinde and Prof. NamrataMahakalkar, "Artificially Intelligent Chatbot", Universal Research Reports, ISSN: 2348 5612, Volume: 04, Issue: 06, July September 2017, pp 43-47.

- [5]. Jincy Susan Thomas, Seena Thomas, "Chatbot Using Gated End-toEnd Memory Networks", International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056, p-ISSN: 2395-0072, Volume: 05 Issue: 03 Mar 2018, pp 3730-3735.
- [6]. Prashanth, RakshithGowda, Sourabh, Gouramm ,Vivek Sharma," Review of AI Chatbot", International Research Journal Of Engineering And Technology (IRJET), e-ISSN: 2395-0056, p-ISSN: 2395-0072, Volume-07, Issue-05, May 2020 p-ISSN: 2395-0072.
- [7]. Dr. VishwanathKarad MIT World Peace University Pune, India-411038" Research Paper on Chatbot Development for Educational Institute".
- [8]. TarunLalwani, ShashankBhalotia, Ashish Pal, ShreyaBisen, VasundharaRathod, IJIRCST, "Implementation of a Chat Bot System using AI and NLP Volume-6, Issue-3, May 2018.
- [9]. AmeyaVichare, AnkurGyani, YashikaShrikhande, NileshRathod, IJARCET," A chatbot system demonstrating Intelligent.
- [10]. Balbir Singh Bani, Ajay Pratap Singh, "College Enquiry Chatbot Using A.L.I.C.E (Artificial Linguistic Internet Computer Entity)", International Journal of New Technology and Research (IJNTR), ISSN:2454-4116, Volume-3, Issue-1, January 2017 Pages 64-65.
- [11]. MalusareSonali Anil, Kolpe Monika Dilip, Bathe PoojaPrashant, "Online Chatting System for College Enquiry using Knowledgeable Database", SavitribaiPhule Pune University, Preliminary Project Report, pp 1-53,2017.
- [12]. AmeyTiwari, Rahul Talekar, Prof.S.M.Patil, "College Information Chat Bot System", International Journal of Engineering Research and General Science, ISSN 2091-2730, Volume 5, Issue 2, MarchApril, 2017, pp 131-137.