

AI Based Interactive College Chatbot for NMCOE

Rutuja Prakash Patil¹, Priyanka Hanmant Hadave², Nilam Sarjerao Patil³, Mrs. H.S. Majgaonkar⁴
^{1,2,3,4}*UG Student Nanasheeb Mahadik College of Engineering, Peth Department of Computer Science and Engineering, NMCOE College of Engineering, DBATU University, Lonere, India*

Abstract -- This venture points in fostering a conversational chatbot for school. Most of the time, Students need to visit school organization office to gather different data viewing school, for example, Tuition charges, Term Schedule, and so on during confirmation process or according to their day-to-day needs. Consequently, to conquer this issue, a chatbot can be planned and created which can be effectively coordinated with any school site to give important data in regards to school. The objective of AI based chatbot is to make a productive discussion among human and machine by means of hear-able or literary strategies. This venture utilizes Natural language handling to deal with the client's question and produce a significant reaction. Additionally, different libraries are utilized for various purposes like tolerating the sound information, changing discourse over completely to message, meaning wanted language, and so on. The pandemic has impacted a great deal of fields all over the planet. One of them is the instructive field. Numerous understudies in the metropolitan as well as the country parts of India couldn't visit the colleges to get data about scholastics. This chatbot would dispense with these concerns. All the data required can be gotten to on the web.

Keywords— Chatbot, Query, Graphical User Interface, Natural Language Processing, Artificial Intelligence.

I.INTRODUCTION

Chatbot is a PC application that emulates human discussions in its normal configuration alongside printed or voice correspondence. In the usage of AI methods along with regular language handling (NLP) [1],[3] chatbot for school site can be planned. This framework will be a web application, so it can give answers for the dissected questions of the client. Client essentially has to raise the question to the chatbot and the framework will be a web application, so it can give answers for the dissected questions of the client. Client essentially have to raise the question to the chatbot and the framework will answer to the clients through the strong Graphical User Interface (GUI) which is like informing application interface, and gives a cordial climate to the client as they are much mindful of working informing application[1],[2] The client can present the inquiry concerning the school related data or exercises, for example, confirmation process, contact data, address, yearly day, sports day, admission and other social exercises of universities. Fostering a chatbot tackles the

issues that can emerges in get-together required school data. This framework can be open from anyplace and whenever. Chatbot will convey effective and important reaction to the client relating to their entered message Chatbot framework will be gainful for understudies, guardians, instructing and non-showing staff too. As of now, there are different chatbots accessible for the understudies like UNIBOT, ALICE and so on. UNIBOT is intended for the understudies to ask college related inquiry. For this framework another calculation is created to convey a suitable reaction to the client comparing to their entered message [2]. ALICE is a standard put together chatbot based with respect to the Artificial Intelligence Markup Language (AIML). This System utilizes NLP and Pattern Matching Algorithm [3],[6],[7] to handle client's query [8].

This paper is separated into a few segments, where Section I contains the presentation of chatbot framework, Section II contains Related Work of chatbot framework, Section III makes sense of the Methodology with engineering graph and stream diagram, Section IV contains Results and Section V depicts Conclusion and Future Work.

II.RELATED WORK

Saraswat et.al, has created GALGOBOT for College Campuses that are enormous as far as the area they cover. Assuming that someone in particular has a question that he needs to enquire, he/she would need to make a trip to different divisions gathering portions of the solution to the inquiry he had. The proposed framework, GALGOBOT facilitates the inquiry tackling process by saving time and exertion. GALGOBOT, a chatbot framework goes about as a friend and can be coordinated on school sites. A Login and Signup System website pages was likewise included the framework to keep obscure clients from get-together inside data. The product would likewise pose different inquiries to find exact solutions to the question by using Natural Language Processing (NLP) model which is useful all the while. GALGOBOT expects to smooth out the course of question tackling [1].

Hrushikesh Koundinya K. et.al, examined how headways in Artificial Intelligence and Machine Learning innovation are being utilized to work on many administrations. In particular. They take a gander at

improvement of chatbots as a channel for data dissemination. The program chooses the nearest matching reaction from nearest matching proclamation that matches input using WordNet, it then picks reaction from known determination of articulations for that reaction. That venture was planned to carry out online chatbot framework to help clients who access school site, utilizing devices that uncover Artificial Intelligence strategies, for example, Natural Language Processing, permitting clients to speak with school chatbot utilizing normal language input and to prepare chatbot utilizing proper Machine Learning techniques so producing a response will be capable. There are various applications that are consolidating a human appearance and meaning to recreate human exchange, yet in most piece of the cases information on chatbot is put away in a data set made by a human master [2].

Neelkumar P. Patel et.al, in there's paper dealt with association among clients and chatbot which can be gotten to from anyplace whenever. The chatbot can be handily joined with any college or school site with not many straightforward language changes. Chatbot gives different data connected with college or school and furthermore understudies related data. The chatbot can be utilized by anybody who can get to the college's site. That paper utilizes the idea of Artificial Intelligence and Machine Learning. PHP Language is used for the advancement of Chatbot. Client can ask college related inquiries, then the inquiry is applied as a contribution to calculation, which processes the message and shows the comparing reaction to the client. That Project GUI is like a Messaging Application [3].

Manasi Ghadge et.al, examined that having a chatbot in instructive foundations. While considering a foundation in any case, whether it is a school or college it is weighty that the understudies are enlightened in a compatible climate. This sums up that the foundation ought to captivate each essential as cardinal or expected by the understudies or the personnel in that climate. The present-day process infers that everything the work is done physically and will undoubtedly unleash botches. To limit the slip-ups, it is unsurprising to have a PC profited web-anticipated framework that will invigilate the foundation portion thinking about these elements. The framework will in this way add to decreasing the manual endeavors taken when table facilitator and furthermore the time consumed for the cycle [4].

W. Astuti et.al, has fostered a famous discourse framework in the field of normal language handling (NLP) is the chatbot. Chatbots expect to make discussions among people and machines. Coronavirus is an individual from the Coronaviral (CoV) group of the Corona vitrine family which makes the respiratory framework become

extreme in people. This paper predicts chatbot replies to inquiries regarding COVID-19 with the RASA system and utilizations the DIET Classifier pipeline for 300 preparation information. The test results with the DIET Classifier model on `rasa.core.test` and `rasa.nlu.test` gave certainty upsides of F1-Score, accuracy, and precision for the right solution the inquiry concerning COVID-19, specifically 1.0 with a level of around 85% [5]. J. Gupta et.al, The author says the most common means by which unwell people receive health related analysis, disease diagnosis, and medicine prescription are hospitals. This has almost become the norm of all individuals around the world. Hospitals are considered the primary and the most reliable means of diagnosis. The proposed idea of this is to make it easier for people to check on their health as compared to the conventional way of standing in a queue for hours before they could get their medication done [6]. M. Saiful et.al, The creator says a Chatbot is a well-known stage to empower clients to collaborate with a product or site to accumulate data or execute activities in a mechanized design. Lately, chatbots are being utilized for executing monetary exchanges, in any case, there are a number of safety issues, for example, secure verification, information honesty, framework accessibility and straightforwardness, that should be painstakingly taken care of for their wide-scale reception. As of late, the blockchain innovation, with various security benefits, has arisen as one of the fundamental advances with the possibility to upset various application spaces, especially in the monetary area [7].

W. Ye et.al, The creator says throughout recent years, there has been a developing interest in creating chatbots that can banter brilliantly with people. For instance, consider Microsoft's Xiao ice. A profoundly insightful exchange framework fills in as both a social sidekick and a menial helper. Focused on towards Chinese clients, Xiao ice is associated with 660 million internet-based clients and 450 million IoT gadgets [8].

III.METHODOLOGY

We will foster a ChatBot managing connections of guests. The ChatBot is coordinated with the school site. The proposed project work can deal with understudies' questions connected with affirmation, situation, grounds, school exercises, occasions and by and large climate in the school. The ChatBot having intuitive, appealing point of interaction where guests can clarify some pressing issues, questions, data. The framework will recover productive and important data which will fulfill the guests.

The venture will make the inquiry tackling process simple and basic by saving time and exertion. This chatbot framework goes about as a friend and can be incorporated

on school sites. The primary plan to plan this undertaking is to address different school related questions. The proposed technique utilizes both subjective and quantitative viewpoints and incorporates a wide exhibit of approaches, for example, writing surveys, well-qualified assessments, center gatherings, and content approval.

The proposed framework will have the accompanying modules:

A. Online query:

Understudies can enquire about offices and question connected with tests, scholastics, charge structure, and so forth. Understudies can likewise pose inquiries connected with arrangement exercises.

B. Online query:

The outcome can be displayed as pictures and card design or in text design. The inquiry will be addressed based on questions asked and the language model fabricated and furthermore the reaction media made. Clients that need to enquire about the school at the hour of confirmation or any rivalry held in the school can question to the visit bot.

Given below is the system architecture of this chat-bot: The basic algorithm that will be implemented for working of this proposed system is as follows:

- Step 1: Start.
- Step 2: Get the input query from the user.
- Step 3: The query is pre-processed.
- Step 4: Fetch the remaining keywords from the query
- Step 5: Match the fetched keywords with the keywords in Knowledge base, and provide an appropriate response.
- Step 6: Further the Database module is used to call proper services using entity information to find proper data.
- Step 7: The keywords will be matched with the help of keyword matching algorithm.
- Step 8: It returns the query response to the bot
- Step 9: Chat-bot packages the data into proper response for display by the client.
- Step 10: Exit

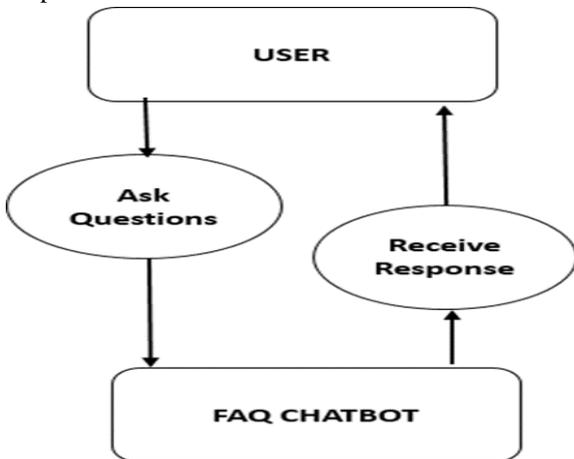


Fig: Conceptual design of Chatbot

The chatbot brings the name of the client that visits the school site, invites the client by referencing their name, requesting help. The question as an information is then broke down by the remote helper, and afterward continues as indicated by the prepared model to get the most ideal reaction.

The discussion continues till the client is fulfilled, in the event that the client isn't fulfilled by the reaction, the question is put away in a data set by the field of inquiry, not set in stone by the expectations and elements.

IV. RESULT AND CONCLUSION

The Chatbot is to complete a discussion between both human and machine. The primary thought behind chatbot execution is to satisfy the scholastic necessities of the clients, In this chatbot shows the basic and appealing spring up Interface for College Chatbot System. First and foremost, chatbot will print a welcome message then a client can type and present the inquiry and bot will give a fitting solution to the client's question. this inquiry is posed to by the client and right response is given by the chatbot. The User can inquiry any college related queries through the chatbot framework

The aim of the system is to provide a user-friendly and efficient chatbot system for College. The chatbot will be very useful in guiding students to get correct and up-to date information source. This system will be fruitful for students, teachers as well as parents. They can get information at any time without having to visit the college administration office every time. In the future scope of this project, the system will include voice-based requests and responses. Users are required to provide voice input and the system will output in the form of text. Chatbot will be able to provide a voice output as well, with the help of text to speech or speech to text conversion. Artificial intelligence chatbots utilizes regular language handling (NLP) and AI to comprehend the unique situation and purpose of a client's question design and to make associations between various inquiries which are asked in various ways to give a superior reaction.

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