College Enquiry CHATBOT Using AI

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ABSTRACT

A chatbot is designed to initiate communication between robots and people. The computer has the knowledge built in to recognize sentences and choose an appropriate answer on its own. Every text will be used in chatbots. The user can submit commands and receive text responses using the user interface. In order to work, chatbots are often services that keep track of prior commands. Even more people can use it safely thanks to chatbot technology. popular web services integrated. Chatbots for university research are developed using synthetic algorithms that examine user requests and comprehend user messages. The chatbot's responses should match the user's input while preventing the user from physically making themselves available to the institution in response to inquiries. Before addressing the user, the system analyses the user's query. To respond to the students' inquiries, the system makes use of its intelligence. (1).

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I. INTRODUCTION

Software programmers can have a variety of user interfaces, including command-line, graphical, web application, and even voice. The most popular user interfaces for programmers are graphical and web-based, yet there are instances when a different interface is needed. Depending on the circumstances, such as multi-threaded complexity, concurrent connectivity, or peculiarities about the service's design, a chatbot-based interface may be suitable. The text-based user interfaces of chat bots allow users to submit commands and receive responses in the form of text or text to speech. In order to provide functionality, chat bots are typically stateful services that retain memories of past commands (and sometimes even conversations). When connected to well-known web services, chatbot technology may be used safely by even more individuals. The Data About Students Artificial algorithms are used in chatbot development to assess user queries and comprehend user messages. The System employs hard-coded information about the students and the college together with some built-in artificial intelligence to respond to the question.

II. LITERATURE SURVEY

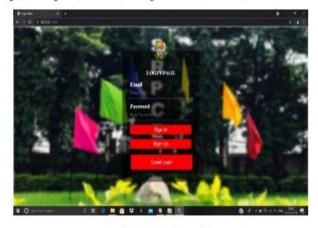
"Under "Undertaking Crowd Computing for Human-Assisted Chatbots," in particular. A rather powerful PC companion that resembles a person is not a novel concept. Lone aides assisted legends in science fiction literature and films for an amazing length of time and managed their work commitments, from Hal in "2018: A Space Odyssey" (1968) to Jarvis in "Iron Man" (2018). The leading conversational researchers rose to prominence in the 1960s. Despite utilising crowdsourcing to develop chatbots with human assistance "The idea of a knowledgeable, human-like Computer partner is not brand-new. From Jarvis in "Iron Man" to Hal in "2018: A Space Odyssey," lone workers kept legends alive for a long time and assisted them in juggling their work commitments. In the 1960s, the first conversational researchers started to appear. research. The use of rule-based concepts definitely changed them. Chatbots are content-based conversational administrators that live in taskspecific applications that provide instructional, esteem-based, or conversational institutions (such as Facebook Messenger, Telegram, Whatsapp, and WeChat). They resemble a conversation between two people. Given a customer request, the language getting (LU) fragment establishes the user's point and the pertinent information; the action execution and information recovery (AEIR) part carries out the mentioned tasks or retrieves the intriguing information from its data source; the response age (RG) part develops a response to the customer; and finally, the trade, the board (DM) segment jams and notifies the setting of a conversation to request missing information, to proceed. Top-tier chatbots are still hardly exceptional; they struggle to maintain a protracted conversation while providing excellent service for consumer requests. Every component of the chatbot is vulnerable to the detrimental consequences of various limitations when used in obvious circumstances. For instance, the DM might ignore requests for clarification regarding missing information, the LU might improperly handle translating custom requests, the AEIR might fail to locate the referenced data or complete the privilegereferenced movement, and the RG might fail to respond in a way that is satisfactory. [2].

III. METHODOLOGY

Focus groups, literature reviews, expert comments, and content validation are just a few of the approaches that are included in the suggested methodology, which integrates qualitative and quantitative perspectives. The following modules will be included in the suggested system:

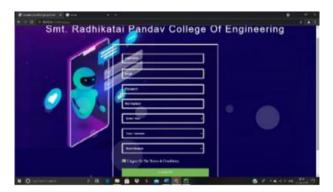
A]LOGIN MODULE

In this case, the student can log into the system by using their login and password.



B] SIGN UP MODULE

Students can create accounts in the system in this module by providing details about themselves, including their names, branch semesters, years, photographs, roll numbers, etc.



C] LOGIN AS GUEST

In this module, users can communicate with the chatbot directly without logging in or registering. There are times when users prefer to use the chatbot without first registering, but in those circumstances it would be very beneficial if they provided their phone number or email address.



D] CHATBOT INTERFACE MODULE

This module provides an accessible, potent graphical user interface that gives the impression that a human is speaking to the user.

Users must enter their inquiry in the chat section, where they can converse and inquire about college- and department-related activities.



E] CHATBOT ENGINE MODULE

This module's goal is to address the student's inquiry. By utilising the capabilities of machine learning, we will create a single ML model in this lesson that will be in charge of responding to student inquiries. To comprehend the user's purpose and respond to their query, this model combines NLP and AI.



WORKING PRINCIPLE

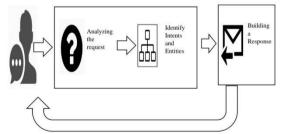


Fig 1 How a chatbot works

Figure depicts the operation of a chatbot. the demand for a chat feature on traditional websites, where a bot is required to be able to communicate with visitors and address their queries. When compared to a live human, who can only handle two to three tasks at once, chatbots can operate without a maximum capacity, which significantly scales up the operations. Additionally, having a chatbot on the internet eases the burden on the customer care team if a business or institution gets a lot of enquiries. It is clear that the response rate is higher when comparing a chatbot to a human support team. Millennials are drawn to chatbots because they provide a highly interactive marketing platform, and they prefer live conversations over phone calls. The routine duties can also be automated by a chatbot. In some cases, a company or institution could receive the same requests repeatedly throughout the day, requiring the support team to address each one separately. The fact that a chatbot is accessible around the clock is by far its greatest benefit. A user can always find the solution to their question. The benefits of using a chatbot for college inquiries are all good reasons to do so.

PROBLEM STATEMENT

Artificially intelligent chatbots that use natural language processing make it easier for humans and robots to communicate. For the college, we are building a chatbot that responds to user inquiries concerning college-related information. The college website has the bot integrated. The bot responds to the user with the appropriate responses in less than a nanosecond. Also, it contains an analytics area that displays the number of visitors that utilized a bot to search the website for information about the college. This analytics area is only accessible to the administrator. Humans can only handle two to three people at once and frequently get bored answering the same queries repeatedly. But, by using this bot, it can support n people and is accessible all day.

IV. RESULT

In order to let students perform necessary research without even visiting a college, a Chatbot has been developed. Google can be used to access necessary searches that are unrelated to the subjects or problems the chatbot deals with.

User Interface - Analyse user conversations and understand user inquiries. Clearly react to the user's query by offering a solution. The learner will benefit from this method of keeping up with school activities. to save the user's time because she won't have to go to the school in person to get information. The system will react using an efficient GUI.

V. CONCLUSION

The system's goal is to help students stay updated on their college activities. With the aid of AI and Smart databases, artificial intelligence is the technology that is expanding the fastest anyplace in the world. Virtual assistance and pattern recognition are transformable. With the aid of a virtual assistant and an artificially intelligent database, this technique builds a chatbot that runs on the Android operating system. We are able to develop a chatbot that can distinguish between machine and human speech and reply to user requests. The project's main objective is to reduce the workload of the college's office staff and hasten the user request processing.

REFERENCE

[1]. PRAJAKTA, "Aritifical intelligence based on college enquiry chatbot," vol. 2, no. 2, p. 5, 2021.

[2]. P. S, "Reserach paper on chatbot for student enquiry," vol. 3, no. 1, p. 9, 2020.

[3]. H. Gawade, "College enquiry chatbot system," IJERT, vol. 9, no. 9, 2020.