



General ChatBot for Medical Applications

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Abstract

Applications for chat bots (and voice bots) are being used more frequently in customer care or e-commerce as a direct line of communication between businesses and customers. A software programme known as a "bot" executes automated, repetitive, and pre-defined tasks. For people, it would be nearly impossible to respond to every single client question. The benefit of employing the notion of a bot is that it eliminates the laborious process of manually responding to customer requests. A bot handles everything automatically. Artificial intelligence is a concept that chatbots employ to communicate with people. It has security features like the ability to deactivate accounts that are sending unsolicited messages. We introduce the bot framework in this paper. Bot is a runtime engine that launches the chatbot programme automatically. and controls security. Bot is freely accessible and open source online.

Keywords: ChatBot, Queries; Artificial Intelligence; Software Application

1. Introduction

Discord is a platform for real-time messaging that also offers a chat platform for students. It is referred to as a "all in one voice." Once users sign up for the server, they can utilize all the bot's functions, including voice chat, chat, questions, etc. Servers are a group of continuously running chat and query channels. Because of its user-friendly UI and feature set that is expandable, discord has gained popularity. Discord's capability for programmable bots that can help link the app with the outside world is an intriguing addition. On Discord, bots are common and can offer a variety of services, including chat, audio, video, and payment processing. Instant messaging is expanding quickly and has also been adopted by businesses. Due the number of messages, concurrent messaging, and chatbot sessions will all rise as a result of an increase in messages. Chatbots are useful in a variety of scenarios, including education, query clarification, e-commerce, and social networking, to automate jobs and enhance the user experience. It offers built-in assistance for chatbot apps, which are robotic chat agents that communicate with platform users. Additionally, software engineering chores like automating deployment operations, assigning software bugs and issues, fixing build failures, scheduling tasks like sending reminders, and integrating communication channels are made easier with the help of chatbots. Social media is increasingly being used by students to request and receive management services. As a direct communication link between students and end users, chatbot apps are being used more and more in a variety of industries, including e-commerce and management services. A software program called a chatterbox or chatbot is used to have text-only or text-and-speech conversations online. The chatbots for colleges are used to provide administrative services, answer student questions, etc. A convincing Graphical User Interface (GUI) is used by the system to provide responses, giving the impression that a real person is conversing with the user. There is no required format that the user must adhere to; they are free to follow any format. This idea enables the user to make inquiries without physically visiting the college. The user can utilize this web application to inquire about college-related activities online.

2. Classifications

They are divided into the following three groups:

- 1) Configuring the user interface (UX) with a unique tab bar, full-screen questions, and other screens.
- 2) Including user login and profile functionality.
- 3) Tracking user data and status with Firebase Storage.

These segments are addressed in detail and each has many tasks.

II Every university requires a chatbot. This is why:

A campus guide is necessary for any college. Newly enrolled students frequently inquire about things like "what are the college hours?" and "what is the bus route" at the beginning of each academic year. With more questions being asked by fresh students and faculty members having to answer the same set of questions year after year, there is a slowdown. College chatbots have been developed for university and college websites all around the world. Because they don't require faculty supervision, bots are significantly simpler than human representatives. All students must access the university website and use the chatbot to submit their questions.

III. College enquiry chatbots guide students to the correct information sources.

Students typically line up in front of the administrative office in colleges to obtain various pieces of information (queries).

Each student has a different question about the course, the class times, the cost, etc.

Each time, the faculty member must enter the student's name or registration number to find the appropriate data before passing it on to the pupil.

This must be a tedious process that occurs frequently at colleges; automation by the bot would make it much simpler.

Example 1:

Chatbot- "Hey, Welcome to our college portal chatbot. How can I help you?"

Student- "I want to join in CSI events?"

Chatbot- "please contact your class incharge."

Student- "Thank you mam."

Chatbot- "do you need help in any other problem?"

Student- "No mam."

Example 2:

Chatbot- "Hey, Welcome to our college portal chatbot. Please choose any one to access the required information like Enrolments, Fees Payment, Campus, Exams, Time tables, About Us."

Student- "I want to know the event dates"

Chatbot- "check the timetable."

IV. Chatbots updates and reminders throughout the semester

Chatbots can help students throughout the academic year, not only at the beginning. Throughout the semester, colleges and universities can employ chatbots to keep students informed about upcoming tests, internal exams, sports, community activities, results, and events. Students can make a reservation with their request, and someone from the university's relevant department will update it within two days. Students can ask the chatbot things like, "When is the semester exam?" and "When is the deadline for my paper presentation?" Similarly, it is possible to include essential updates and reminders in the chatbot's initial response.

V. Iconic Representation.

Iconic representation of the Chatbot is displayed below as shown in **Figure 1**.

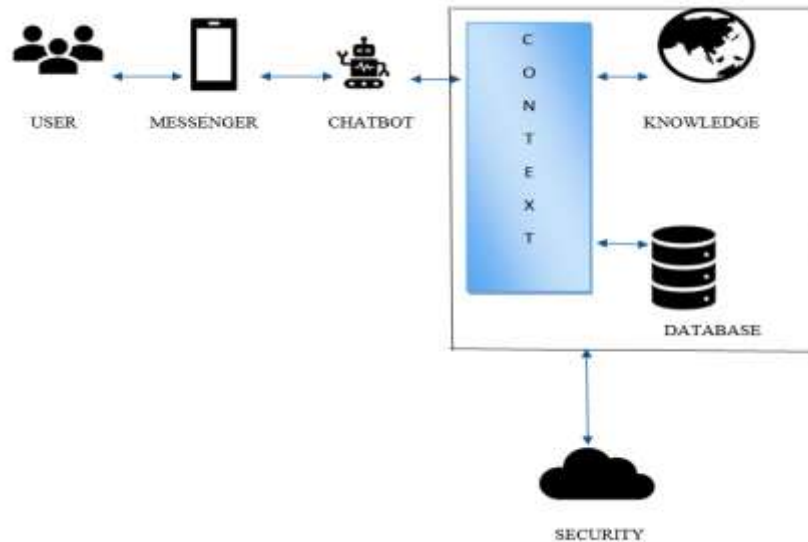


FIGURE 1.

Figure 1:Iconic Representation

VI. Literature Survey:

Table 1: Various papers were studied and analyzed for Chatbot.

TITLE&AUTHOR	YEAR	TECHNIQUE	FINDINGS
A multimode low-code chatbot development framework. Gwendal Daniel, Jordi Cabotr, Laurent Deruelle, Mustapha Derras.	2017	Xatkit runtime Application.	Chatbot building domain.
Discord Platform as an online learning environment. Vladyslav Kruglyk, Dmitriy Bukreiev, Pavlo Chronyi, Evgeniy Kupchak, Andrey sender.	2020	Online learning environment.	Uses online platform to study.
College enquiry chat-bot. Harshala Gawade, Vedika Patil, Prachi Vishe, Sonali Kolpe.	2020	Using artificial intelligence to solve queries.	Chat-bot system deals with queries.

A comprehensive Review on bot-discord bot. Anirudh Verma, Shashikant Tyagi, Gauri Mathur	2021	Discord application, Virtual Room environment	Its functions posting text, Images and videos from various subreddits on reddit. Actively read the message from the discord text channel
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VII. Proposed System.

This system primarily consists of a web service-based application and a chatbot with built-in bots. The bot's function is to automatically respond to students who ask questions in a secure chatbot environment. Between management and students, bots are crucial.

Online enquiry:

The online environment has replaced the world of paper and pen. The use of chatbots for communication, productivity, and vagueness from engagement helps to close the communication gap between teachers and pupils. With the help of a bot, user interaction is simple and human. This platform offers powerful administration tools that are scalable, portable, and highly secure. The system's chatbot is utilised to ask questions of the management. The fundamental idea behind these chatbots, which respond on behalf of the pupils, is bots. Students can ask the bot questions on placement specifics. The availability of facilities and questions about exams, academics, cost structures, bona fides, etc. are all available to students. The bot's administration can additionally add inquiries and pertinent responses.

Online chatbot:

Chatbot removes complexity and aids in creating the greatest learning environment for the students. The outcome or response might be displayed in text or card format. The answers to the questions will be based on the inquiries made by the students as well as any response media produced. When applying for admission, students have the opportunity to ask questions about the college, as well as any competitions that are hosted there. Additionally, it blocks the account when students approach administration with inappropriate queries. The user will enter their login ID here to access the college web site. They can then start using the chatbot to ask queries about college-related topics. There are already a number of college-related questions and facts in the chatbot database. by the management of the college. If the information requested by the user is already in the chatbot database, the answer to the user's query is displayed on the screen. The query will be handled next to the admin database if the requested information is not already in the chatbot database. Now that the administrator has responded, the information has been saved in the admin database so that when the student asks the same question again, the screen will show the administrator's response.

Steps:

- Using a chatbot, a user submits questions to the college website.
- When a question is sent, the chatbot scans the database to see if the answer already exists.
- If the information is in the database, the chatbot will show the user the solution if it exists.
- The default message "answer not found" will be presented if the data is not present in the database.
- The user is now prompted to decide whether the admin should respond to the enquiry.

- If the statement is accurate, the query will be saved in the admin database, the administrator will respond, and the response will be sent back to the chatbot database.
- Otherwise the query will be discarded. by the management of the college.
- If the information requested by the user is already in the chatbot database, the answer to the user's query is displayed on the screen.
- The query will be handled next to the admin database if the requested information is not already in the chatbot database.
- Now that the administrator has responded, the information has been saved in the admin database so that when the student asks the same question again, the screen will show the administrator's response.

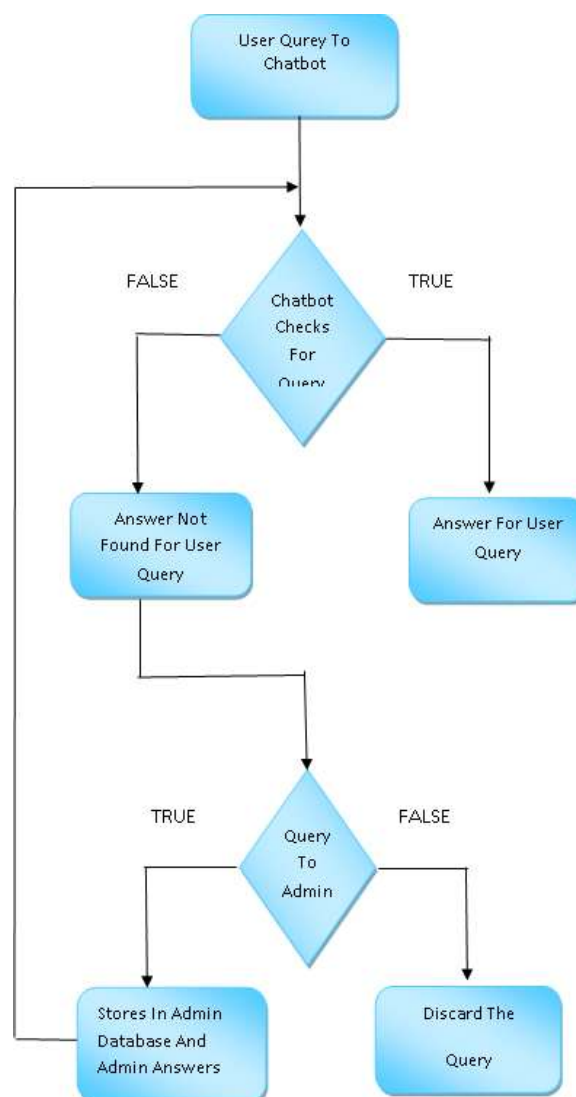


Figure 2: The flowchart for the proposed system is displayed below

VIII. Conclusion

Since we used as little time, manpower, and travel as possible, the suggested approach is dependable and economical. We can easily, cheaply, and quickly communicate with management using the chatbot. This improves the chatbot's reusability and makes it easier to redeploy it when the management's demands change. Beyond the actions and events that come with the current bots version, the runtime component may be simply expanded to include more platform-specific ones.

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