COLLEGE ENQUIRY CHATBOT

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ABSTRACT:

A chatbot is software that is used to interact between a computer and a human in a natural language, as humans chat. Chatbots engage in conversation with users in place of humans and respond to them. The goal of this report on chatbots was to resemble a human being in the way they interact, trying to make the user think he is chatting with another human being. The chatbot application helps students access university-related information from anywhere with an internet connection. This system reduces the work of college administration providing information to students and reduces the workload on the staff to answer all the students' queries. This project aims to develop a college inquiry chatbot that answers any queries posted by students, like college details, course-related questions, location of the college, fee structure, etc. The College Enquiry Chatbot project is built using deep learning algorithms that analyze user's queries and understand the users' messages. This system is a web application that returns answers to queries. Any individual can simply query the bot. The answers are appropriate to the user's query. The system allows users to query any college-related activities. The user does not have to personally go to the college for an inquiry. The system analyses the question and then answers it for the user. Through the suggestion box, users can also provide suggestions. The system replies using an effective graphic user interface, which implies that a real person is talking to the user.

KEYWORDS: Chat bot, Artificial Intelligence, Enquiry, Response, Query.

1 . INTRODUCTION

Earlier, students had to visit the institution to inquire about courses, tuition structure, admission procedure, and other college-related information, which was a tedious and time-consuming process. Here's where we considered deploying an intelligent bot to provide the information. College Enquiry Chatbot is a simple Python web application that responds to user requests for college information.

Before anything else, we must comprehend the definition and operation of a chatbot. A chatbot is a computer program designed to simulate conversation with human users, typically through text or voice interfaces, and ML has propelled chatbots to new heights of sophistication and usability. Chatbots can assist users instantly at any time of day or night, enhancing accessibility and responsiveness. Conversational interfaces engage users in a more interactive and personalised manner, leading to higher user satisfaction and retention. Chatbots collect valuable data on user interactions, preferences, and pain points, enablin organisationsns to gain insights for improving products, services, and processes. Overall, chatbots serve as valuable tools for enhancing customer service, streamlining operations, and delivering seamless user experiences across various domains. Chatbots typically provide a text-based user interface, allowing the user to type commands and receive text as well as text-to-speech responses. Chatbots are usually stateful services, remembering previous commands (and perhaps even conversations) to provide functionality.

2 . Review of Literature:

This research paper explores a college inquiry chatbot designed to answer student questions about college activities. The chatbot uses algorithms to interpret queries and provide accurate, real-time responses online, reducing the need for in-person visits and keeping students informed. While it offers benefits like increased convenience and time savings, drawbacks include potential slowness during high traffic and reliance on internet access. Developed using traffic. With this and natural language processing, the chatbot features a web interface and a database storing queries and responses. Its future aims to provide a comprehensive information resource, streamlining access to details like fees and admissions.

Title	Year	Mythology	Description
College Enquiry Chatbot Using Knowledge in Database	2017	Harsh Pawar	The creation of an artificial intelligence-powered "College Enquiry Chat Bot" The chatbot's objectives were to comprehend messages, evaluate user inquiries, and respond to inquiries from students.
Implementation of Chatbot	2018	P. Nithyakalyani	The chatbot aimed to assist students with various inquiries, including admission procedures, course details, and examination schedules.
A Web-Based CollegeEnquiry Chatbot	2018	Sagar Pawar,	Improved information gain algorithms are used.
College Enquiry Chat-Bot	2019	Karanvir SinghPathania	Uses Libraries and Artificial Intelligence Markup Language to have conversations with humans.
College Enquiry Chat-Bot System	2020	Prof. Ram Manoj Sharma	I proposed a college inquiry chatbot system that has been built using artificial intelligence algorithms. The bot analyses the user's query and understands user messages.
College Enquiry Chatbot	2021	Mrs. Nidhi Sharma, Gayatri	Made by creating an HTML and CSS file and by writing AIML Scripting for ChatBot Standard startup file: (std- startup. aiml). SQLite Database as well as Flask were used.

3. Methodology

A college enquiry chatbot typically follows a combination of methodologies to function effectively.
Here are some key methodologies involved in the development and implementation of such a chatbot:

- Natural Language Processing (NLP): NLP is a crucial methodology for understanding and processing human language. It helps the chatbot to interpret user queries, extract relevant information, and generate appropriate responses.

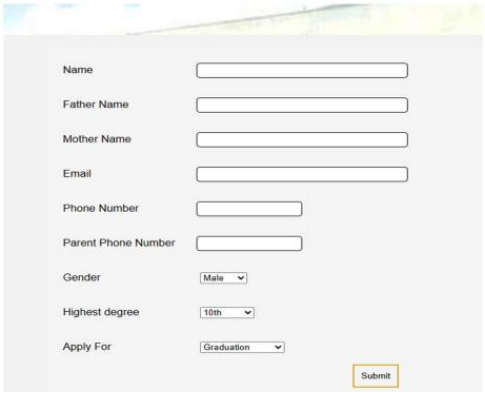
- Machine Learning (ML): ML algorithms enable the chatbot to learn from past interactions, improve its understanding of user queries, and enhance its response quality over time.

- Dialogue Management: This methodology focuses on managing the flow of conversation between the user and the chatbot. It ensures that the chatbot maintains context and provides relevant information based on the user's previous queries.

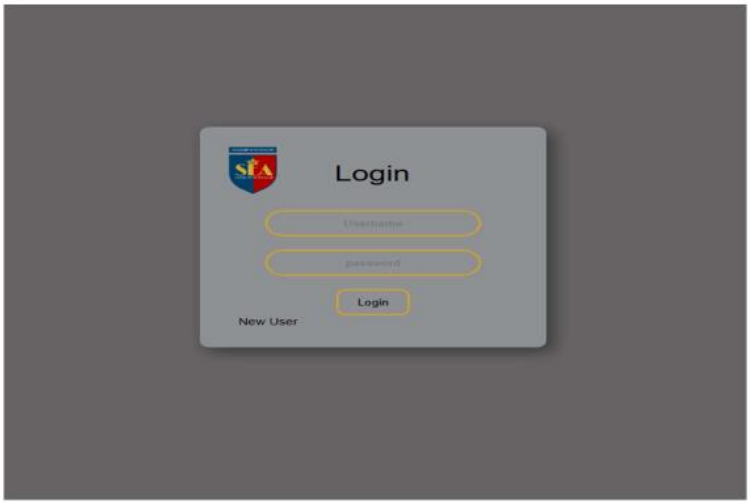
- Knowledge Representation: This methodology involves organizing and structuring the chatbot's knowledge base, which includes information about the college, courses, admission processes, fees, and other relevant topics.

4. Model with experiment result

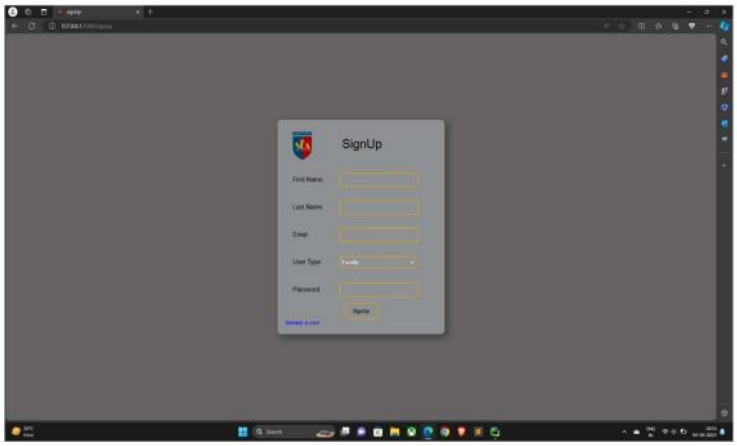
A] Admission page :



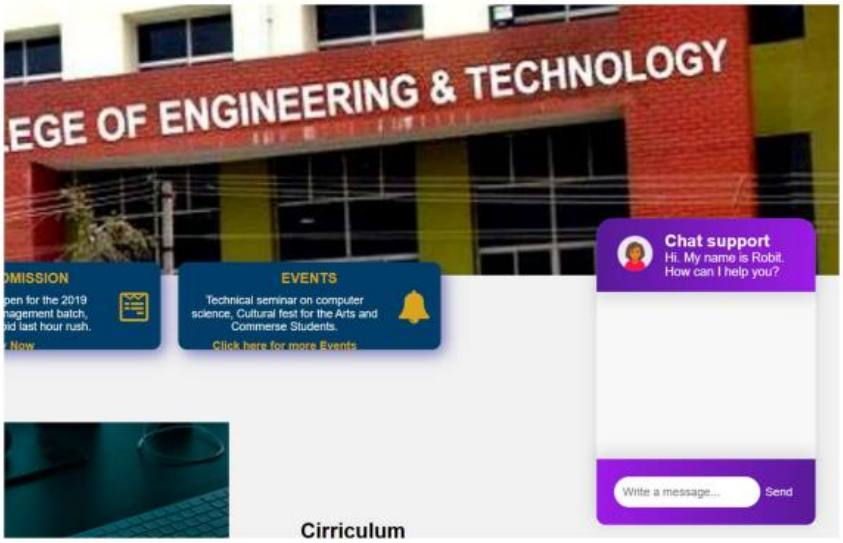
B] Login Page :



C] Sign up :



D] Chat bot :



5. Conclusion

Through the project review, we have discussed the design and development of a college enquiry chatbot that includes features such as admission queries, course information, and student feedback. The chatbot has been trained using Natural Language Processing techniques to understand the intent of students' questions and provide appropriate responses. The college enquiry chatbot project provides a practical solution to the challenges faced by educational institutions in managing student inquiries. It is a step towards leveraging the benefits of Artificial Intelligence and Natural Language Processing in the education sector, which can result in enhanced student satisfaction, improved efficiency, and a reduced workload for staff. The chatbot can be further developed and expanded with additional features to cater to the diverse needs of students and enhance their overall experience.

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