

COLLEGE ENQUIRY CHATBOT

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Abstract - In today's digital age, instant access to information is essential for effective communication between educational institutions and students. Traditional enquiry methods are time-consuming and require manual effort from administrative staff. This paper presents the design and development of a College Enquiry Chatbot, an AI-driven conversational system that provides students and visitors with immediate responses to their queries. The chatbot uses Natural Language Processing (NLP) to interpret user inputs and generate accurate answers regarding college admissions, courses, faculty, and campus facilities. The system is developed using web technologies with a user-friendly interface, ensuring 24/7 availability and improved communication efficiency.

Key Words: Chatbot, Artificial Intelligence, Natural Language Processing, College Enquiry System, Web Application.

1. INTRODUCTION

Chat bot was a computer application which may speak to human beings naturally, the way we interact with one another. It can replace a person's for several tasks of answering queries. A chat bot is an agent that interacts with users using simple language. [1] it had been built as an effort to fool humans. Several applications of chat bots like Customer Service, call centers etc. uses AI terminology to talk with user. one among the prime goals of chat bots is to resemble an intelligent human and make it difficult for the receiver of the conversation to know the important working along side various architecture and capabilities for his or her usage has widely broadened. These chat bots can prove sufficient to fool the user into believing they're "talking" to a person's being, but are very limited in improving their knowledge domain at runtime, and usually have a very little to no means of keeping track of all the conversational data. Chat bots makes use of machine learning to succeed in AI helping them to know the user query and supply an appropriate response. The chat bots are developed using the synthetic Intelligence terminology for communicating or interacting with the user. This consist a software which can be made up using codeigniter php framework and can help user to talk with machine

2. LITERATURE REVIEW

Various studies have been conducted on chatbot technologies in education. Early systems were rule-based

and relied on predefined scripts, which limited their ability to handle diverse user queries. However, with advancements in Natural Language Processing (NLP) and Machine Learning (ML), modern chatbots can now interpret user intent and learn from interactions. Dialogflow, Rasa, and IBM Watson have been widely used platforms for building intelligent conversational systems. Research by Daniel Jurafsky and James Martin (2020) emphasized the role of NLP in language understanding and human-computer interaction. These technologies have paved the way for efficient, domain-specific chatbots in fields such as healthcare, education, and e-commerce. [2] As students, we require many types of information regarding our college and university during our course. Sometimes getting this information is rather cumbersome and lengthy. Like getting information regarding our fees structure or the due fees remaining is a very lengthy process we have to go to administration building and find the correct window and then look for a no dues form then fill it with correct data and then submit it to the appropriate person and then that person will tell us our due fees. This is all long, hectic and unnecessary. We live in an age of computer science, where automation and simple procedures are easy to achieve. So why have this long and unnecessary process to get this trivial information. We as a computer science student are always looking forward to solving the problems around us using the technology that we learn and how to implement them to achieve ease of usage in real life.

3. OBJECTIVES

1. The main object of the student in the College Enquiry Chat Board
2. Through this system, students can post their queries, get information about various departments, courses, events, and academic details instantly.
3. It helps students to save time and avoid manual enquiry processes.
4. To make enquiries about college details, courses, and admission procedures.
5. To get updates about exams, results, and events.
6. To communicate with faculty and admin directly through chat.
7. To create a digital platform that improves communication between students and college authorities.

4. EXISTING SYSTEM

In the existing system, college enquiries are typically handled manually through phone calls, emails, or in-person

visits. Students and parents need to contact the administrative office or specific departments to get information about courses, admission procedures, fees, faculty details, or other academic-related queries. This manual process is time-consuming, inefficient, and often leads to delays in response, especially during admission seasons. Moreover, it increases the workload of administrative staff and can result in inconsistent or incomplete information being provided to the enquirer. There is no automated or centralized system to handle multiple queries simultaneously, which makes communication less effective and user satisfaction lower.

5.PROPOSED SYSTEM

The proposed system is a College Enquiry Chatbot integrated into the official college website to automate and simplify the enquiry and information process. This intelligent chatbot will utilize Artificial Intelligence (AI) and Natural Language Processing (NLP) technologies to understand and respond to user queries in a conversational manner. Students, parents, and visitors can interact with the chatbot in real time to get instant and reliable answers related to admissions, courses offered, fee structure, scholarships, hostel facilities, campus infrastructure, placement details, faculty information, events, and contact details.

The chatbot will operate 24/7, ensuring continuous availability and support even outside office hours, which greatly improves accessibility for users from different locations and time zones. It will also feature an interactive and user-friendly interface that allows users to type or select questions effortlessly. Moreover, the system will have a self-learning capability, meaning it can analyze past interactions, identify common queries, and continuously update its knowledge base to enhance response accuracy.

In addition to providing instant information, the chatbot can also redirect users to specific web pages, collect feedback, and store chat logs for further analysis by administrators. This helps the college understand user needs and improve the services offered.[3] The system can also include a dashboard for admin users to monitor chatbot performance, update FAQs, and add new responses as needed.

By implementing this automated chatbot, the college can reduce the workload on administrative staff, eliminate repetitive manual responses, and enhance overall communication efficiency. It provides a modern, digital-first experience that aligns with the growing use of AI in education,.

6.IMPLEMENTATION

The following figure will illustrate the block diagram for the proposed system:-

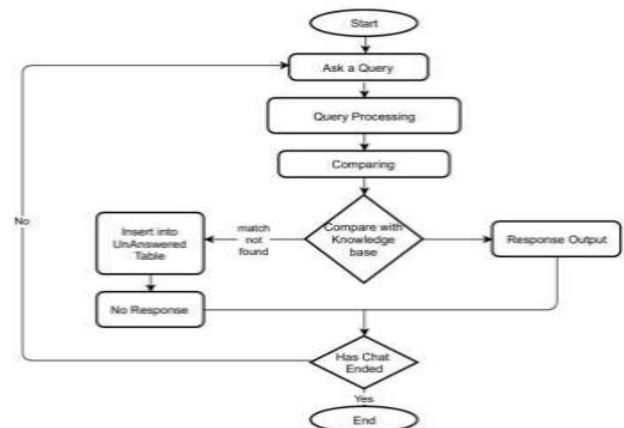
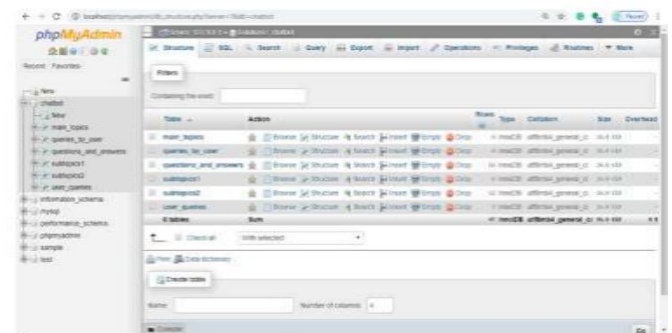


Fig-1: Flow Chart diagram for College Enquiry Chatbot

6.1Creation of Tables in the Database

Fig-2: Tables in the Database



7.RESULTS AND DISCUSSION

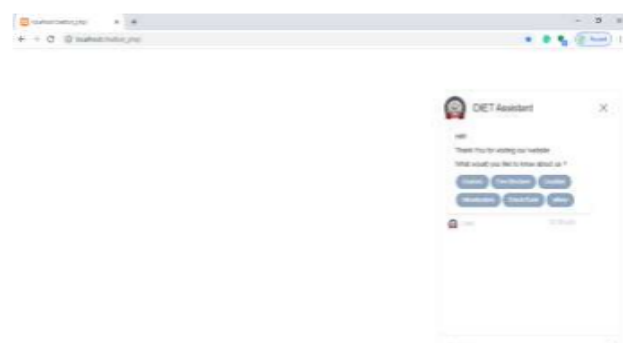
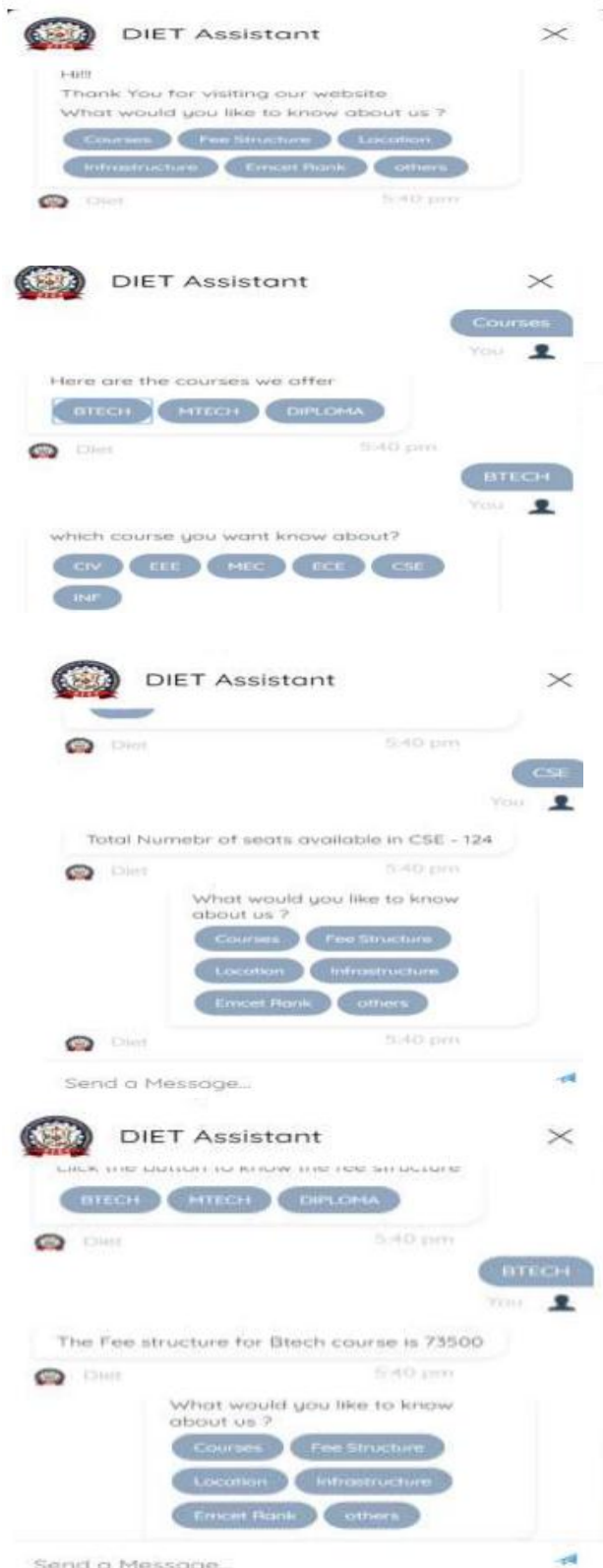


Fig-3 Running the Application in the XAMPP

The result will be displayed as follows:

8. LIST OF OUTPUT SCREENS



9. CONCLUSION

The College Enquiry Chatbot is an innovative solution designed to automate and streamline the information dissemination process within an educational institution. By integrating Artificial Intelligence (AI) and Natural Language Processing (NLP), the chatbot can efficiently handle a wide range of student and visitor queries related to admissions, courses, fees, faculty, facilities, and events. This system reduces the workload on administrative staff, ensures 24/7 availability of information, and enhances user experience by providing instant and accurate responses. Overall, the College Enquiry Chatbot contributes to improved communication, operational efficiency, and digital transformation in educational institutions.

10. FUTURE SCOPE

The College Enquiry Chatbot can be further enhanced with advanced technologies and features to make it more interactive and intelligent. In the future, it can be integrated with voice recognition and speech-to-text capabilities to support voice-based queries. Adding multilingual support will help users interact in their preferred language, improving accessibility for diverse audiences. Integration with college databases and student management systems can enable personalized responses and real-time updates about admissions, exam schedules, and results. Furthermore, the chatbot can be connected to social media platforms and mobile applications to expand its reach. Implementing machine learning algorithms will allow the chatbot to learn from past interactions, continuously improving its accuracy and efficiency.

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