

STUDENT CHATBOT SYSTEM USING ARTIFICIAL INTELLIGENCE

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Abstract - This project aims to develop a college enquiry Chabot 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 machine learning algorithms that analyze user's queries and understand the user's message. This System is a web application that provides answers to the query. Any individual just has to query through the bot. The answers are appropriate to what the user queries. The User can query any college-related activities through the system. The user does not have to personally go to the college for enquiry. The System analyzes the question and then answers to the user. The user can also give their suggestions through the suggestion box. The system replies using an effective Graphical User Interface which implies that as if a real person is talking to the user.

1.INTRODUCTION

Nowadays, we see the chat bots everywhere Chatbots are the source of answers to the user's questions in any particular domain where it is operating. Chat bots are the source of answers to the user's questions in any particular domain where it is

operating. The most popular example today is Amazon's Alexa. Chat bots are at almost every place, one can see it at every second website they visit. A bot is helpful in answering queries related to information which might be unreachable at that website easily. Most of the websites avail users with chat bots to aid them to go through what the websites facilitate. They are turning out to be our virtual assistants in everyday lives

A chatbot is an artificially intelligent creature which can converse with humans. This could be text-based, or a spoken conversation (in case of voice-based queries). Chat bots are basically used for information acquisition. It can run on the local PCs and mobile phones, though most of the time it is accessed through the internet. It can be compelling, captivating and spell-bounding. It is a conversational agent which interacts with users in a certain domain or on a particular topic with input in natural language sentences. Mainly a chatbot works by a user asking some question or initiating a new topic of discussion.

Chat bots can be referred to as software agents that pretend to be human entities. These are the agents with AI embedded and using NLP they can answer user questions. Predefined knowledge base helps develop a response to the query.

1. <u>Chatbot for College:</u>

the slow nature of college website, an outsider would not know where to search for a particular piece of information, difficult for the person outside

college's domain to extract information. The smart solution for all the drawbacks lends to the need of the system. The college inquiry system will provide the response by summarizing the query and then output answers, it also provides selective information about what the user wants. A college system will dispense all answers relating to domains such as admission, examination cell, notice board, attendance, placement cell and other miscellaneous domains.

- 1. <u>The major features of the chatbot are</u>:
 - College admission related queries could be answered through it.
 - Viewing user profiles and retrieves attendance and grade/ pointers.
 - College students can get information about examinations to be held.
 - College students can fetch particulars about placement activities College inquiry system will act as a fast, standard and informative widget to enhance college website's user experience and bestow users with righteous

information. The bot will analyze user's queries and understand users' messages and then reply accordingly. It uses AI & NLP. This way users' time and efforts will be saved and s/he will be equipped with effective answers.

- 1. <u>The objectives of this application are</u>:
 - To analyze users queries and understand users' messages.
 - To provide an answer to the query of the user very effectively.
 - To save the time of the user since s/he does not have to personally go to the college for inquiry.
 - This system will help the student to be updated about the college activities. The system will reply using an effective GUI which implies that as if a real person is talking to the user.

2.BODY OF PAPER

OBJECTIVES

Artificial intelligence chatbot is a technology that makes interactions between man and machines using natural language possible. From literature, we found out that in general, chatbots function like a typical search engine. Volume: 06 Issue: 04 | April - 2022

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Although chatbot just produced only one output instead of multiple outputs/results, the basic process flow is the same where each time an input is entered, the new search will be done.

Nothing related to previous output. This research is focused on enabling chatbot to become a search engine that can process the next search with the relation to the previous search output. In chatbot context, this functionality will enhance the capability of chatbot's input processing

MODULES

Client-Server (chat user): The proposed system has a client server architecture. All the information will be kept in an optimized database on the central server.

Chatbot: A chatbot is a technology that allows users to have natural conversations to access content and services. Chatbots typically take the form of a chat client, leveraging natural language processing to conduct a conversation with the user. Chatbots control conversation flow based on the context of the user's requests and respond with natural language phrases to provide direct answers, request additional information or recommend actions that can be taken.

Pattern matching: Bot sends a query to a machine for comparison. The query match with database sends to data service

PROPOSED SYSTEM

The proposed methodology makes use of both qualitative and quantitative perspectives, and includes a broad array of approaches such as literature reviews, expert opinions, focus groups, and content validation.

The proposed system will have the following modules:

A. Online Enquiry:

Students can enquire about facilities and query related to exams, academics, fee structure, etc.

Students can also ask questions related to placement activities.

A. Online Chatbot:

The result can be shown in the form of images and card format or in text format. The query will be answered on the basis of questions asked and the language model built and also the response media created.

Users that want to enquire about the college at the time of admission or any competition held in the college can query the chat-bot.

PROBLEM STATEMENT

Artificial intelligence chatbot is a technology that makes interactions between man and machines using natural language possible. From literature, we found out that in general, chatbots function like a typical search engine. Although chatbot just produced only one output instead of multiple outputs/results, the basic process flow is the same where each time an input is entered, the new search will be done. Nothing related to previous output. This research is focused on enabling chatbot to become a search engine that can process the next search with the relation to the previous search output. In chatbot context, this functionality will enhance the capability of chatbot's input processing

SCOPE OF WORK

A Student Information Chat Bot project is built using artificial algorithms that analyze user's queries and understand the user's message.

This System is a web application which provides answers to the query of the student very effectively.

Students just must query through the bot which is used for chatting.

Students can chat using any format, as there is no specific format that the user must follow.

The System uses built in artificial intelligence to answer the query.

The answers are appropriate what the user queries

3. CONCLUSIONS

It is often impossible to get all the data on a single interface without the complications of going through multiple forms and windows. The college chatbot aims to remove this difficulty by providing a common and userfriendly interface to solve queries of college students and teachers. The purpose of a chatbot system is to simulate a human conversation. Its architecture integrates a language model and computational algorithm to emulate information online communication between a human and a computer using natural language

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