

Chatbot using Artificial Intelligence

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Abstract- The main purpose of the project is to develop an AI based platform for student to answer their instant queries via chatbots. Artificial Intelligence (AI) is the theory and development of computer system to learn, understand, and cater to new situation. A chatbot may be a typical example of an AI system and one of the most elementary and widespread examples of intelligent Human-Computer Interaction. Nowadays the utilization of chatbots is popular in large of applications, in fact, to make it fast, system is provided up with chatbots that can interpret the user questions and provide right answer.

We are using flask framework. it is small and lightweight python web framework that gives specific tools and feature that make creating web application in python easier. For frontend and backend, we are using HTML, JavaScript, and python. for database MySQL, also we are using chatterbot API.

Keywords - Artificial intelligence (AI), Chatbot, query resolution, Natural language processing NLP

I. INTRODUCTION

Chatbots is part of natural language processing (NLP), wherein it requires machine to learn as in line with human language, just so it can satisfy the wishes of person. Chatbots behaviour conversations with human beings, and developers usually hope that customers may not recognise they are speaking to a robot. AI chatbots are also known by way of many different

names: Talbot, bot, IM bot, sensible chatbot, conversation bot, AI conversation bot, speaking bot, interactive agent, artificial conversation entity, or digital talk chatbot. It is far one of the software or applications which takes the user queries and tries to reply those queries based totally on its expertise. it has been not possible for any institution to connect with their leads in actual time, specifically after operating hours or on vacations. So right here, may be a conversational AI-based totally education Chatbot which helps intelligently engage with candidates during their admission adventure.

Chatbots have developed with the modern growth in computational competencies and advances in human language Processing equipment and techniques. The accelerated blessings of chatbots caused their extensive adoption by many industries to offer digital help to customers. A chatbot can method user input and convey an output. commonly, chatbots take natural language text as enter, and consequently the output must be the most applicable output to the person enter sentence. they are currently implemented to a spread of various fields and programs, spanning from education to e-commerce, encompassing healthcare and leisure. consequently, chatbots can provide each guide in several fields in addition to entertainment to customers. it can simultaneously help more than one user, accordingly ensuing more efficient and less highly-priced in comparison to human consumer supports offerings.

similarly, to guide and assistance to customers, chatbots are frequently used for imparting

entertainment and companionship for a person. If the consumer wishes to understand whatever related to time table, class time table, or to fill registration form, he/she will be able to get the moment answer to their queries inside a minute, which also solves their hassle.

II. METHODOLOGY

The flow chart represents the work flow of chat bot, each box (node) within the diagram is a state, which corresponds to a chatbot message. Given the present box and the user's response message, one among the outgoing links (edges) is followed, supported the condition assigned to each link.

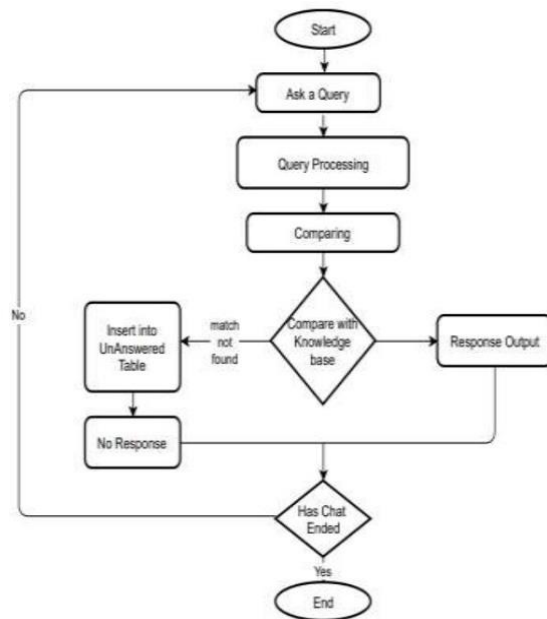


Fig. Flow Diagram

The conditions are evaluated from top down, until the primary satisfying condition is found. If no condition is satisfied, the Default link is followed (top link in above image) if there is one, else the execution stays within the current box, and therefore the same message is displayed to the user.

III. IMPLEMENTATION

The implementation of the chatbot requires installation of libraries, frameworks, and various modules. The chatbot is utilizing Python because the programming language. The chatbot is developed in such how that we can input a query to the program and it will generate the related output to the user as the response. The chatbot can store the knowledge provided and learn from its experience as well. the primary and the foremost part of the software is its environment and the libraries used for creation of the bot. the event of the chatbot requires its related libraries. the foremost significant library used here is chatterbot which is a library provided by python to provide responses to the user. The importing of required package and modules is that the next step of implementing the chatbot. the subsequent step requires import of required classes such as Chatbot and List Trainer.

The implementation utilizes these classes to make instances of them and to create and train the bot. we have trained the chatbot using corpus and used get response function to urge the response of the query. we have imported chatbot corpus trainer class from chatterbot. Trainers' module to coach the chatbot for automated responses of a query. Flask framework is employed which is a web framework provided by python module for creating web applications. It contains libraries and modules for implementing the appliance. The frontend is made using HTML, CSS and JavaScript and Backend is made using Python as the programming language along with its libraries and modules for the implementation of chatbot. The queries initiated by the user is managed with the database MySQL which manages the queries, provides the related responses, and stores the info for future reference.

IV. CONCLUSION

A Chatbot is nowadays utilized in various fields ranging from businesses, industries to healthcare and education. Chatbots are an impacting innovation within the technology world. it is an application of artificial intelligence and natural language processing. The Chatbot for college kids to solve their queries instantly will provide help as well as advantage to the students and the administration. The most objective of the AI chatbot for student query would be to solve queries of the students and to bridge the gap between the administration and the user and hence our AI based solution as a chatbot will provide solution to the users

in the most efficient way. it will take the input query and instantly generate immediate response to their question and also store the information for later and learn from the experience. This will give up to 90% accuracy and will be successful in helping students with their doubt resolution. It can provide advantage in queries associated with fee payment and academic matters. Students can get the knowledge at their convenience with the help of the chatbot.

V. FUTURE SCOPE

In the future, to improve the current functionalities of the chatbot, we can implement further training modules and train the bot with additional data. We can implement speech recognition feature to give the users the functionality to ask their queries verbally and interact with the bot as like amazon's Alexa or apple's Siri, our chatbot can solve student's queries with much more as a human interaction to provide a more realistic experience. Chatbot can be trained to have a sentiment analysis to understand the queries in an efficient way and interact with the users along with being aware of the context.

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