



SOFIA AI BASED CHATBOT

Mani Kant Prasad

Student ECE

Roorkee College of Engineering
Uttarakhand, India

Alok Kumar Thakur

Student ECE

Roorkee College of Engineering
Uttarakhand, India

Prithwish Samanta

Student ECE

Roorkee College of Engineering
Uttarakhand, India

Deep Mondal

Student ECE

Roorkee College of Engineering
Uttarakhand, India

Under the guidance of

MS. NISHA DHIMAN

(HOD of ECE & EEE)

Roorkee College of Engineering ,Roorkee, India

Abstract

A chat-bot is a software application that uses text or text-to-text to conduct an online chat conversation instead of providing direct contact with a live human agent. Designed to convincingly simulate the behavior of a human conversational partner. Designed to convincingly simulate how a human would behave as a conversational partner. In the proposed system, we presented a chatbot that generates a dynamic response to online client queries. The proposed system is based on an artificial intelligence-powered chatbot. The web-based platform offers a vast intelligent base that can be used to simulate human problem-solving. This proposed chatbot identifies the user context that triggers the specific intent for a response. Because it is a dynamic response, the desired response will be generated for the user. The proposed system learned the Chatbot by observing various user responses and requests using machine learning algorithms. After consulting 17 IEEE papers and 13 Standard papers, our research concluded that the strength of Chat-bot is that it can be used in a variety of fields in our daily lives. Nowadays, chat-bots are becoming increasingly robust as Artificial Intelligence assists the human touch in every conversation. Chat-bots understand the user's query and trigger an accurate response. The goal of this project is to demonstrate how chatbots can help an organization reduce its reliance on humans while also reducing the need for multiple systems for different processes.

Key Words— Machine Learning , AI.

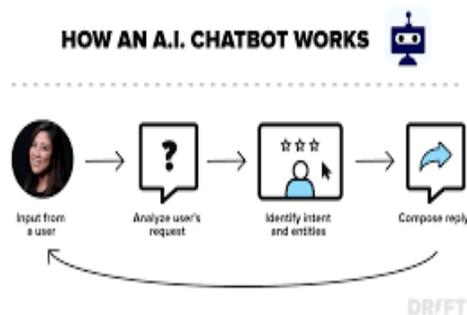
I. INTRODUCTION

A chatbot or chatterbot is a software application used to conduct an online chat conversation via text or text-to-speech in place of providing direct contact with a live human agent. A chatbot is software that can help customers by automating conversations and interacting with them through messaging platforms. Designed to simulate how a human behaves as a conversational partner convincingly, chatbot systems typically require continuous tuning and testing, and many in production remain unable to converse adequately. At the same time, none of them can pass as a virtual assistant. Like in websites where traffic is

more than usual than we need someone to be available to all the customers or users that visit the page. So when the traffic will be more the virtual assistant will come handy. The virtual assistant is usually trained with different texts for different situation.

the standard Turing test. So what we have done here is that we have taken help of python language and made up a chatbot. A chat bot can also be thought of For example greeting the user, understanding some problems of the user, bidding the user goodbye thereon and thereforth. There is a json file filled with

texts on which the computer needs to be trained and then what we have done is that trained on the json file. Such that the perfect reply would be there for an perfect question.



II. TECHNOLOGY

Instead of offering direct communication with a live human agent, a chatbot is a software programme that is used to conduct an online chat conversation using text or text-to-speech. designed to accurately mimic how a genuine conversation partner would conduct themselves. We included a chatbot that creates a dynamic response to online clients' questions in the suggested system. The proposed system is based on a chatbot that uses artificial intelligence. The web-based platform offers a sizable cognitive base that can aid in simulating human problem-solving. requests. After consulting 17 IEEE publications and 13 Standard papers, our research's conclusions indicate that the strength of chatbots is their ability to be used in a wide range of aspects of daily life. These days, chatbots are starting to be quite capable since artificial intelligence helps the human touch in every discussion, enables chatbots to understand users' questions, and enables them to deliver accurate responses. The goal of this project is to demonstrate how chatbots can lessen an organization's reliance on humans and the requirement for various systems for various operations. Technology plays a massive role in the industry and daily chores. It serves a variety of purposes and is applied in a different way in different parts of the world. Recently, the public has been fantasized by Artificial Intelligence. Artificial Intelligence simulates the cognitive abilities of a human. To be more precise and closely related to humans, the AI Chatbots are now replacing human responses with this software. A Chatbot is a computerized program that acts like a colloquist between the human and the bot, a virtual

assistant that has become exceptionally popular in recent years mainly due to dramatic improvements in the areas like artificial intelligence, machine learning and other underlying technologies such as neural networks and natural language processing. These chatbots effectively communicate with any human being using interactive queries. Recently, there's been a massive increase in many cloud-based chatting bot services which have been made available for the development and improvement of the chatbot sector such as IBM Watson, Cleverbot, ELIZA chatbot and many others. These conversational agents have become more responsive and the art of conversation between humans and robots over the past few years have improved drastically. In this paper, we have generalized the AI chatbots and described the general template for the same. A chat-bot is a software programme that is used to conduct an online chat conversation utilising text or text-to-speech instead of providing direct communication with a live human agent. meant to closely resemble how a real conversation partner would behave. In the suggested system, we incorporated a chatbot that generates a dynamic answer to inquiries from online clients. The suggested solution is built 3 on top of an AI-powered chatbot. The web-based platform provides a significant cognitive foundation that can help in replicating human problem-solving. Our research's findings, which were drawn after reviewing 17 IEEE publications and 13 Standard papers, suggest that chatbots' versatility makes them effective in a variety of daily situations.

III. PROPOSALS

Our project is built on a chatbot that is driven by artificial intelligence. Python is software that offers a user-friendly interface to facilitate connections with the internet and deliver authentic and trustworthy web services simpler and more convenient. We developed a test chatbot utilising the same twitch platform, which offers a chatbot platform to web clients. The web-based platform offers a sizable cognitive base that can aid in simulating human problem-solving. If a user has a question or wants to inquire about something, we can assist. Our approach includes creating a chatbot's API using Javascript, which is utilised for the chatbot's functionality, and a Cascading style sheet to handle the styling. Python programming will be used for the back end. Additionally, it includes different machine learning techniques that allow the Chatbot to learn from the responses and requests of different users. An artificial intelligence-powered chatbot serves as the foundation of our project. Python is a piece of software with an intuitive interface that makes connecting to the internet and delivering reliable online services easier and more convenient. We created a test chatbot using the same Twitch platform, which gives web users access to a chatbot platform. A significant cognitive foundation is provided by the webbased platform, which can help in imitating human problem-solving. We can help if a user has a question or wants to find out information. Our method entails using Javascript to create a chatbot's API, which is used for the chatbot's functionality, and a Cascading style sheet to handle the chatbot's styling. The back end will be programmed in Python.

IV. RESULTS

So here we can see that the chatbot is finally working and we have given it a interface to make it to easier for the user to use all we can say it gives us a GUI. The Chatbot name the Sofia works totally on the basis of AI that is Artificial Intelligence. The result of this project is a perfect chatbot that can be used in various applications but here we have made the chatbot solely for the use of a student . This is student application chatbot that is it will help the student to solve any problem related to education.



V. SIMULATION

Chatbots are the new Apps! As we have discussed in the above deliverables, this project brings the power of chatbots to Yioop and enriches its usability. Chatbots in Yioop can give a human like touch to some aspects and make it an enjoying conversation. And they are focused entirely on providing information and completing tasks for the humans they interact with. The above mentioned functionality in all the deliverables is implemented and pushed in to Yioop code. By implementing the above mentioned deliverables I was able to add a basic chatbot functionality in to the Yioop. I.e., configuring and creating accounts for bot users with bot settings which is mentioned in deliverable 2, activating a bot whenever a user asks for it via post in a thread which is discussed in deliverable 3 and as I discussed in deliverable 4, I have implemented a simple weather chatbot that gives weather information whenever a user ask and Fig. 3 tells that I was also able to converse with the bot in Yioop. I intend to enhance the system developed so far in CS298. Next step towards building chatbots involve helping people to facilitate their work and interact with computers using natural language or using set of rules. Future Yioop chatbots, backed by machine-learning technology, will be able to remember past conversations and learn from them to answer new ones. The challenge would be conversing with multiple bot users and multiple user.

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