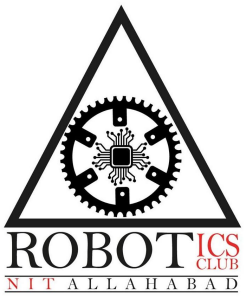

Project proposal

CHATBOT

Mentors -

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Objective -

To send alerts and messages across different platforms with a highly available, low-latency publish/subscribe (pub/sub) service. This is A.I. based chatbot.

This software is built to perform some work easily like customer service, live chat, easy customization, etc.

Description -

This project consists of developing a working text-based chatbot using Natural Language Processing (NLP) using NLTK (Natural Language Tool Kit) library in Python along with RASA framework and using Open AI's chatGPT modules to make it more user friendly and also solve complex requests. The end goal of our project will be to upload it to hosts like telegram and make it available for general use.

Chatbots are basically programs that simulate human conversation. These can range from simple rule-based chatbots, where the user is limited to clicking on buttons or suggested replies that the bot provides, all the way to fully-fledged bots that can handle context, chitchat, and other complex things, which are otherwise very common in human conversation.

Consumers use AI chatbots for many kinds of tasks, from engaging with mobile apps to using purpose-built devices such as intelligent thermostats and smart kitchen appliances. Business use is equally varied. Marketers use AI chatbots to personalize customer experiences, IT teams use them to enable self-service, and customer contact centers rely on chatbots to streamline incoming communications and direct customers to resources. Thus, chatbots have various uses in our daily life and in this project we will aim to make one for our project.

Features -

1. Easy customization

Chatbots can collect user data and function as per customer needs and behavioral patterns with the help of AI, making the entire customer journey more personalized and customized. We can create amazing bots in the right way using the right chatbot script .

2. Quick chatbot training

Instead of manually adding and updating FAQs, you can simply load your knowledge base to the chatbot. The chatbot parses through the information and can provide a suitable answer within seconds. Instead of passing simple queries to live agents, we can rather use DocuSense to empower our chatbots.

3. Interactive flow builder

We can compile & structure questions and their subsequent answers or various replies to certain customer queries.

We can increase the user engagement by using an interactive user interface.

4. Reports & Analytics

It would also be great if the chatbot had a separate report section. These chatbot reports should help you identify how your chatbots are performing. You should be able to see data around the total number of chats they've received, the total number of valid chats and the total number of invalid chats .

Methodology / Work Plan -

Natural language processing-based algorithms are widely used for quality chatbots.

Technology that we will use :

1.) RASA FRAMEWORK --

Rasa is an open-source machine learning framework for building AI assistants and chatbots. In "Rasa Action Server", we need to write code in Python, that mainly used to trigger External actions like Calling Google API or REST API etc.

2.) MACHINE LEARNING ALGORITHM

Natural Language processing algorithms: For chatbots, NLP is especially crucial because it controls how the bot will comprehend and interpret the text input. The ideal chatbot would converse with the user in a way that they would not even release they were speaking with a machine. The bot benefits from NLP by being able to read syntax, sentiment, and intent in text data.

TIMELINE -

S. no.	Description
Week 1	Starting the Project Making the Proposal of the Project and learning about the Natural Learning Processing (NLP).

Week 2:	Learning the Rasa Framework and Revise the Important Points of Python and its library.
Week 3:	Implementing features of the Easy-to-use Customization.
Week 4:	Implementing the component of the Quick Chatbot Training.
Week 5:	Learning about the use of CHATGPT and implementing it into the chatbot.
Week 6:	Implementing the component of the Interactive flow builder and with the final testing and display we will submit the Project.