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# Chatbot Using Python

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**Abstract** – *The days of solely engaging with service through a keyboard are over. Users interact with the system more through voice assistant and chatbot. A chatbot is a computer program that can converse with humans using artificial intelligence in messaging platforms. Every time the chatbot gets input from the user it saves input and response which helps the chatbot with little initial knowledge to evolve using gathered responses. With increased responses, chatbot precision also gets increased. The ultimate goal of this project is to add a chatbot feature and API for Smt. Indira Gandhi college of engineering. This project will investigate how advancements in artificial intelligence and machine learning technologies are being used to improve many services. Specifically, it will look at the development of chatbots as a channel for information and distribution. The program selects the closest matching response from the closest matching system that matches input utilizing WordNet, it then chooses responses from known selection of statements for that response. This project aims to implements online chatbot system to assist user to access college website, using tool that expose artificial intelligence method such as NLP, allowing user to communicate with college chatbot and using a chatbot that can respond to natural language input and has been created using appropriate machine learning techniques.*

**Keywords-** *NLP, Chatbot, MySQL, DJANGO*

## I –INTRODUCTION

**T**echnology 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 have been fantasized by Artificial intelligence. Artificial intelligence stimulates the cognitive abilities of the human. To be more precise and closely related to humans. Chatbot are now replacing human responses with this software. Chatbots or conversational interfaces as they are also known present a new way for individuals to interact with computer systems. Traditionally to get a question answered by a software program involves using a search engine or filling out a form . A Chatbot allows a user to simply ask questions in the same manner that they would address a human. The most well known chatbot currently are voice chatbots: Alexa and Siri. However, chatbots are currently being adopted at a high rate on computer chat platforms. The technology at the core of the rise of the chatbot is NLP.recent advances in machine learning have greatly improved the accuracy and effectiveness of natural language processing, making chatbots a viable option for many organizations. This improvement in NLP is firing a great deal of additional research which should lead to continued improvement in the effectiveness of chatbot in the year to come. A simple

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chatbot can be created by loading an effective  bot software. The The chatbot's capabilities can be expanded by linking it with the company's business software, allowing it to reply to more personal questions such as "What is my balance?" "What is M's status?"

## II -METHODOLOGY

The College Chatbot System is a web-based software that answers to user enquiries. The system architecture of the chatbot system is represented in Figure 1. The chatbot greets the user initially and then demands his or her email address in order to obtain login access to the system. The user then looks for the UI buttons that correspond to the various college category buttons. After going through each button, the chatbot system asks the user if they were helpful in providing the answer. If the user is unable to find the required solution, they can continue the conversation with the college chatbot system by clearly explaining their concerns. The chatbot system then deconstructs the message using machine learning techniques

**Login:** When a user clicks on the chatbot link on the college website, the chatbot system greets him or her and requests his or her email address. The chatbot then starts conversing with the user. To understand about the user's experience with the chatbot, feedback is needed. If the user provides favorable comments, the chatbot thanks the user and displays a box where the user can enter any additional questions. If the user delivers negative input, the chatbot prompts the user to elaborate on his or her problem.

**Botindex:** When a user picks a chatbot to answer a query, the chatbot displays a page where the user can select from a few college options and recognises the user's type of enquiry. The chatbot's task is complete after the user's question is addressed.

**Asking Queries:** If the user is not satisfied with the rule-based response, the chatbot system will prompt them to enter their query in words and the suitable response. Flowchart for the User Module of the chatbot. Initially, a database query is checked. If the question is valid, a suitable response is delivered to the user. If the user's query is unjustified, the chatbot suggests contacting a college representative.

**Providing feedback :** Following the interaction, the chatbot solicits user comments. Feedback is gathered to determine how users feel about the chatbot. If the user provides positive feedback, the bot thanks them and

prompts them to enter any additional queries. If a user delivers negative input, the bot will ask the user to be more precise in order to respond. If a user is dissatisfied with a rule-based response, the chatbot system prompts them to type their inquiry and the proper response. User Module flowchart for the chatbot. The database is initially validated for the user's query. If the question is legitimate, the user receives an acceptable response. If the user's query is unjustified, the chatbot suggests contacting a college representative. The user's username is also recorded, allowing the administrator to track user conduct. A block diagram is a type of system diagram in which the primary components or functions are represented as blocks connected by lines that show the connections between the blocks. It may also show how the system works, its various inputs and outputs, and how information and/or materials flow through it. The flowchart for "Online Chatting System for College Enquiry Knowledgeable Database" The suggested system is designed using client-server architecture.
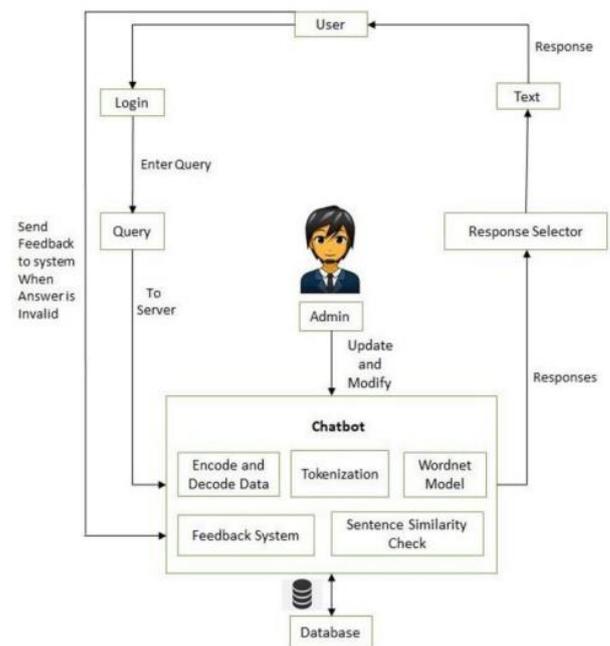


*.Fig. 1- Chatbot block diagram*

A block diagram is a representation of a system in which the primary components or functions are represented by blocks linked together by lines that demonstrate their interrelationships. It may also explain how the system operates, what its inputs and outputs are at various stages, and how information and/or materials travel through it. The flowchart for "Online Chatting System for College Enquiry Knowledgeable Database" The

proposed system employs a client-server architecture. All data will be saved in an efficient database on the central server. Users can get this information using the Android application they have installed on their cell phones (client computers). The user interface on each client PC will be improved

Consumers can access material and services through informal interactions with a chatbot. Chatbots often employ natural language processing to converse with users via a chat client. Chat-bots direct conversation flow and answer with natural language expressions to give plain responses, ask for additional information, or suggest appropriate actions based on the context of the user's demands. The figure below depicts a high-level illustration of how a chat client could employ natural language processing to assist with content access or data inquiries.

- Users must sign in to use the chatbot.

- Then you must send a server query. This search will query the database

- The database in MYSQL where all the data is stored through relational method
- In this database all the data is stored in table format.
- The query from the user will search the data through the following process. a. firstly it will encode and decode the data the data b. then tokenization c. check sentence similarity
- Then it will send the reply to the server
- Also it will take the feedback after replying the server
- There is also an admin option where admin can update and modify the details in the database as per the feedback from the user.

### III - CONCLUSION

We developed a college-specific chatbot system that can be adapted to the education sector in this project. We intend to boost user interaction on the page by incorporating our chatbot system into the college website, while also investigating the design stages of our college chatbot system and a few strategies for increasing the chatbot system's precision. To make the chatbot system's responses more accurate and meaningful, the administrator must teach it more about

college and increase its knowledge base Obtaining user feedback, on the other hand, may be important in developing a college Chatbot system that will eventually reply to consumer enquiries

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