

GCET Virtual Help Desk ‘Chat Bot’ using Python and Telegram API

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Abstract— This paper proposes a method for generating a chatting bot’s back-channel responses in a text-based chat. We studies methods for triggering text-bases discussions. The Python programming language is used in this Chatbot system. The Chatbot software system is very important in the studies field, particularly for communicating information directly and in a way that is acceptable to a large number of users at the same time. This paper concentrated on the use of the Telegram application for the Chatbot system. As a result, not every query was carefully addressed by the conversation participants. If the chatting bot posts back-channel comments in reaction to what the other users have said, we assume that the chatting bot is acknowledged as a conversation participant and that the queries of the chatbot are attentively participants of the conversation respond. The results suggest that posting both back-channel queries and replies by the chatbot boosts conversation activation. The various back-channels responses were properly posted as follows rather than a condition, A backchannel response is posted by the chatbot whenever a remark contains a question mark, signifying acceptance of the second response.

Index Terms— Chatbot, Telegram, Programming Index Terms— Chatbot, Telegram, Programming

I. INTRODUCTION

Students will apply for Engineering admission after completing their high school education or their diploma. They had a lot of issues before enrolling. Parents and students are concerned about a number of admissions-related issues. When choosing an excellent engineering college, students struggle [5]. Telegram Messenger bots are nothing new. Despite their less frequent use compared to other applications. Many times, it is evident that someone might ask follow-up question. The Information Retrieval (IR) and Semantic Parsing (SP) Question Answering Systems over Knowledge Bases provide responses to one query at a time (KB-QA). The conversations between people and robots on Telegram are now available using natural language. We learned from the literature that chatbots generally perform the same function as a standard search engine [1].

The first chatbot even was developed by MIT professor Joseph Weizenbaum in the 1960s. As technological advancements accelerate, they have an impact on the security and oversight of the technology itself. We face multiple the problem of a lack of time in the modern world. Every day, each person is required to perform a variety of tasks. As a results, people sometimes overlook the most important aspect: maintaining contact with their relatives.

A. What is chat bot?

A computer application that simulates communication with a person user, particularly through the internet. Online help, ecommerce customer care, customer support, and internet gaming are the main uses for Chat bots. A chatbot is a computer software that simulates human communication by understanding customers and responding to them automatically using (AI)-artificial intelligence and (NPL)-natural language processing.

B. API (Application Programming Interface)

A technique for two or more computer programmers to communicate with one another is called an application programming interface (API). A software interface, it provides an utility to another programmer. A specification for an API is a written document or industry standard that outlines how to create or use such a link or interface. An API is said to be implemented or introduced by a computer system that complies with this specification. Both the specification and the application are referred to as API.

C. Telegram

The best messaging app available, Telegram connects users via a special, distributed worldwide network of data hubs. SYNCED: You can simultaneously view your messages from several phones, tablets, and computers. You do not need to have your phone linked at all times because Telegram apps are self-contained. With the help of the instant messaging app Telegram, you can communicate with your contacts without disclosing your phone number. Is the quickest. The majority of Telegram chats (Cloud chats) are securely encrypted while in transit between your devices and telegram's servers.

D. Our Approach

Chatbots are being developed to alleviate the pain that organization are experiencing today. Any popular chat. platform, including Facebook Messenger, Slack, Telegram Text Messages, etc., might host it. Scale up Operations – Because human agents can only handle two to three chats at once, chatbots can work indefinitely.

1. Objective

The objective are as follows:

- *Justification:* It will respond to the user from any angle.
- *Learning:* It will learn from the it experiences for better output.
- It will accessible in English languages.
- User will be guided through the admissions process and given the chance to offer the ideas.
- User Will Only Ask Questions Using The Chatbot That Is Already In Use. There Is No Need That Students Conform To A Certain Format: They Are Free To Communicate In Any Way They See Fit . The Responses Are Pertinent To The Queries Posed By The User.

II. PROPOSED SYSTEM OVERVIEW

A. Figures and Tables

Position figures and tables at the tops and bottoms of pages. Table I is centre aligned, table II is left aligned and table III is right aligned. Avoid placing tables and figures in the middle of a page. Leave sufficient r •

The proposed system introduces an innovative approach aimed at keeping parents and students thoroughly informed about various college activities, including counseling sessions. Leveraging advanced technology, our web application transforms the user experience by facilitating online inquiries about college-related activities.

Key Features

Real-time Information Dissemination

The system ensures swift communication of college updates, events, and counseling information to both parents and students.

Interactive Web Application

Our solution incorporates an interactive web application that allows users to seamlessly ask questions about college-related activities through an efficient graphical user interface.

Conversational Chatbot

The system features a cutting-edge chatbot designed to mimic natural human conversation. This novel approach simplifies the user interaction, as students can effortlessly pose questions to the chatbot.

Benefits

Enhanced User Engagement

The incorporation of a conversational interface provides users with an engaging and user-friendly experience, making interactions appear as if they are conversing with a real individual.

Efficient Query Handling

The chatbot efficiently responds to user queries, ensuring that pertinent information is readily available and accessible.

In summary, our proposed system goes beyond traditional communication methods, introducing a sophisticated web application with a conversational chatbot interface. This novel approach aims to elevate user engagement and streamline information dissemination about college activities.

III. METHODOLOGY

- Install the Python-Telegram-Bot Library:
- Using pip install python-telegram-bot, you can install this module.
- Create a Telegram bot using the Telegram Bot Creator /Father .
- To create a Telegram bot, you will need to talk to the Telegram Bot Creator, which is a bot itself. You can do this by opening a chat with @BotFather on Telegram and following the instructions.
- Get the API token for your bot:
- The Bot Father will give you an API token that you will use to authenticate your bot and authorize it to interact with the Telegram API.
- Write the code for your bot:
- You can use the python-telegram-bot library to access the Telegram API and interact with users.

Here is an example of a simple echo bot that replies to users with the same message they send to it:
import logging from telegram. Ext import Updater, Command Handler, Message Handler , Filters.

Enable logging

logging . Basic Config (format=' % (asc time)s - %(name)s - %(level name)s - %(message)s', level=logging.INFO)
logger = logging. Get Logger (_name_)

Define a function that will be called when the /start command is received def start (update, context): update.
message. reply_ text ('Hello!')

Define a function that will be called when a message is received def echo (update, context): update. message.
reply_ text (update. message. text)

Create the Updater and give it the token updater for your bot.= Updater ("YOUR_BOT_TOKEN_HERE", use_
context=True)

Obtain the dispatcher's registration as the handlers' dispatcher. = updater. Dispatcher.

Add the start handler to the dispatcher dispatcher. add_ handler (Command Handler ('start', start))

Add the echo handler to the dispatcher dispatcher. Add _handler (Message Handler (Filters .text, echo))

Start the bot updater.start_polling()

Run the bot until you hit Ctrl-C or SIGINT is received by the process, # SIGABRT or SIGTERM. Most of the
time, you should take this, since

Since start polling () is non-blocking, it will terminate the bot properly. updater.idle()

Run the code to start the bot: Once you have written the code for your bot, you can run it using python your_bot.py.
Your bot should now be up and running, and you can talk to it through Telegram.

Code : <https://github.com/amitpr58/Chatbot-using-python.git>

IV. RESULT AND ANALYSIS

The primary focus of this research revolves around the implementation of Python programming in conjunction with the TELEGRAM chatbot system. The overarching goal of the system is to facilitate effective communication with students, ensuring they stay well-informed about various activities within their college. The research has confirmed that the system operates efficiently, successfully meeting the needs of its end users.

To ensure the reliability and functionality of the system, rigorous testing procedures have been employed. During this testing phase, any identified issues have been promptly addressed and corrected to enhance the overall performance of the system.

The implemented program is designed to be accessible from one or more systems, offering flexibility in its usage. The technology utilized in this system provides students with a valuable tool to stay updated on crucial information. Notably, students can conveniently access all necessary college documents related to the admissions process. This accessibility is not restricted by location, allowing students to retrieve information whether they are presently on the college premises or located elsewhere. Overall, the research underscores the utility and effectiveness of Python programming integrated into the TELEGRAM chatbot system for enhancing communication and information accessibility within a college environment. The primary focus of this research revolves around the implementation of Python programming in conjunction with the TELEGRAM chatbot system. The overarching goal of the system is to facilitate effective communication with students, ensuring they stay well-informed about various activities within their college. The research has confirmed that the system operates efficiently, successfully meeting the needs of its end users.

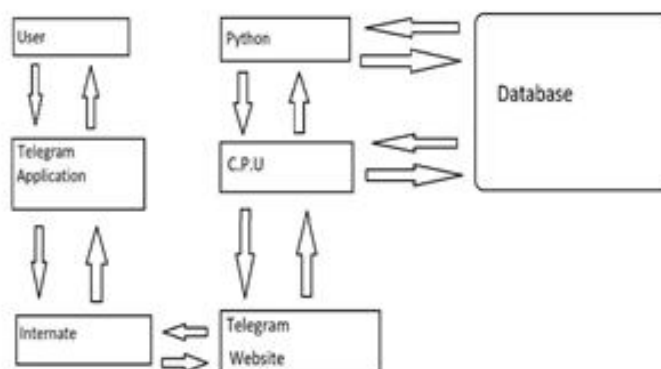


Fig 1. Block Diagram

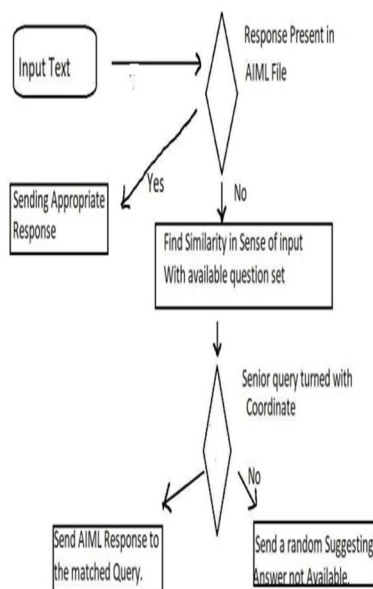


Fig 2. Flow Chart

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V. ACKNOWLEDGMENT

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