CREATE A CHATBOT IN PYTHON

Phase-1 Document submission

Project : **Create a Chatbot using python**

Problem Definition:

A **Chatbot** is an Artificial Intelligence-based software developed to interact with humans in their natural languages. Chatbots are designed to give people an automated way to communicate with your company. They may answer basic questions, make product recommendations, and provide customer support.

BUILDING A CHATBOT IN PYTHON INVOLVES A SEVERAL STEPS :

Import a necessary python libraries

1. Data Collection and Preprocessing:

- Collect a dataset of chatbot messages. This dataset should be well-labeled.

2. Data Splitting:

- Split your dataset into training, validation, and test sets. A common split is 70% for training, 15% for validation, and 15% for testing.

3. Model Selection:

-Rule-based chatbots
-AI-based conversational bots

4. Design the conversation:

- Train your chosen model on the training data.
- Once you've selected a tech stack, you can build the chatbot by designing the conversation flow. If you do this with one of the DIY platforms, the process is almost as simple as drag-and-dropping reply options.

5. Deploy and maintain the bot:

Deploying a chatbot often doesn't take a ton of time. You just need t**o ensure that all endpoints are** connected, and the bot is integrated with your entire infrastructure if you happen to use a CRM, ERP, or similar software systems. Once the bot is deployed, the chatbot development life cycle doesn't end. Now you need to check the statistics and refine answers to keep users happy.

6. Creating Bots with Topflight Apps:

Some of the chatbots we've recently developed include standalone mobile app SoberBuddy, available for iOS and Android, and a mental health bot, built as a progressive web app.

7. Privacy and Compliance:

Human-Chatbot interaction sees that personal data is shared. Due to the nature of the hosting platforms of many chatbots, it is not easy to understand the type of data collected, retained and the retention period, and how it is stored and transferred.vulnerable to hacking and cyberattacks. If a chatbot system is hacked, personal information can be stolen, and the chatbot can be used to spread malware or launch cyberattacks

8. User Feedback:

- Implement mechanisms for users to report false positives/negatives and provide feedback for model improvement.

9. Scalability:

- Design your solution to scale efficiently to handle a large volume of messages in real-time.

Description

chatbot
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use this chatbot to solve any queries about anything and also it were created by python

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Installation
bash
Clone the repository
git clone https://github.com/jsethuramanram/chatbot.git

Navigate to the project directory
cd chatbot

Usage
python

# Example code for using the chatbot
from chatbot import Chatbot
bot = Chatbot()
bot.start()
```
## Features
- Feature 1: [Intractive]
- Feature 2: [problem solving]

This is a comprehensive overview of the steps involved in building a chatbot in python. Depending on your specific needs and constraints, you may need to adjust and fine-tune each step. Additionally, you can experiment with more advanced techniques such as deep learning and natural language processing to further improve classifier performance.

**\*\*\*THANK YOU\*\*\***
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