**Documentation**

Introduction

The Python based chatbot is designed to interact with users in a conversational manner. The chatbot responds to the human conversations. Here, we only discussed simple chatbot designing using python. It offers a set of predefined responses to various questions and statements.

Description

The questions and answers are already given to the knowledge base of the program. At knowledge base the program or system stores the given knowledge and gives the response from that knowledge base whenever the user asks any question. If any of the question that is not predefined in the system then it gives the answer that the programmer write in the code. The chatbot is a simple conversational agent implemented using Python. Its main objective is to engage in conversation with users, providing responses based on predefined questions and answers. Chatbots can use text, voice, or both to communicate with users.

**Functions Defined**:

def\_greet()

- \*Purpose\*: This function returns a greeting message for the user.

- \*Return\*: Returns the greeting message "Hello! I'm your friendly chatbot. How can I help you today?".

def\_farewell()

- \*Purpose\*: This function returns a farewell message for the user.

- \*Return\*: Returns the farewell message "Goodbye! Have a great day.".

def\_handle\_question(question)

- \*Purpose\*: This function handles user queries/questions and provides appropriate responses.

- \*Parameters\*:

- \*question\*: A string representing the user's query or question.

- \*Return\*: Returns a response based on the provided question. If the question is not recognized, a default response is provided.

def\_chat()

- \*Purpose\*: This function facilitates the chat interaction between the user and the chatbot.

- \*Functionality\*:

- Greets the user with the def\_greet() function.

- Accepts user input and passes it to the def\_handle\_question() function to retrieve a response.

- Continues the conversation until the user inputs "farewell" or "no", at which point it sends the farewell message and terminates the chat.

**Main Execution**:

- \*if \_name\_ == "\_main\_":\*

- The code inside this block will only run if the script is executed directly (not imported as a module).

- Calls the def\_chat() function to start the chat interaction.

**Conclusion**

This is how the chatbot is prepared or implemented using python programming language.