**Model Chabot using python:**

**Introduction:**

Creating a Chabot in Python involves several steps, and you can choose different approaches depending on your specific requirements.

We provide with a simple example using Python and the NLTK library for natural language processing.

This Chabot will respond to a few predefined questions.

For a more advanced Chabot, we would typically use machine learning techniques and more extensive datasets.

**Step1:** First, we will make include NLTK installed by using install it pip:

Command:

Pip install nltk

**Step2:** Now, let's create a basic Chabot:

import nltk

from nltk.chat.util import Chat, reflections

# Define patterns and responses for the chatbot

patterns = [

(r'hello|hi|hey', ['Hello!', 'Hi there!']),

(how are you', ['I am a chatbot, I do not have feelings, but thanks for asking!']),

(r'what is your name', ['I am a chatbot. You can call me ChatGPT.']),

(r'(.\*) age', ['I do not have an age.']),

(r'(.\*) (created|made)', ['I was created by OpenAI using GPT-3.5.']),

(r'(.\*)', ['I am not sure I understand.']),

]

# Define some reflection options to make the conversation more natural

reflections = {

"am": "are",

"was": "were",

"I": "you",

"I’d": "you would",

"I’ve": "you have",

"I’ll": "you will",

"my": "your",

"are": "am",

"you're": "I'm",

"you've": "I have",

"you'll": "I will",

"your": "my",

"yours": "mine",

"you": "me",

"me": "you",

}

# Create a chatbot using the patterns and reflections

chatbot = Chat(patterns, reflections)

# Start the conversation

print("Hello! I'm a simple chatbot. You can start a conversation with me. Type 'quit' to end the chat.")

while True:

user input = input("You: ")

if user\_input.lower() == 'quit':

print("Chatbot: Goodbye!")

break

response = chatbot.respond(user input)

print("Chatbot: " + response)

**Step3:**

In this example, we defined some patterns and responses for the Chabot.

You can customize these patterns and responses to fit your needs.

The Chabot uses reflection to make the conversation more natural by transforming pronouns.

**Step4:**

To end the conversation, type "quit" as the user input.

This is basic Chabot. For more advanced Chabot’s with natural language understanding, we will typically use machine learning techniques like neural networks, and it might consider frameworks like Rasa or the OpenAI GPT-3 API for more sophisticated interactions.

**DEMO IMAGE:**

