

Chat box in python

Problem definition:

The problem is to build an AI powered diabetes production system that uses machine learning algorithms to analyse medical data and predict the likelihood of an individual developing diabetes. The system aims to provide early risk assessment and personalized preventive measures, allowing individuals to take proactive actions to manage their health.

Scope of the chat bot's abilities:

Chat bots can provide instant assistance to customers, which can help reduce wait times and improve customer satisfaction. In the future, chat bots may become even more sophisticated and be able to handle more complex customer service interactions.

The chat bot market size was estimated at USD 5.85 billion in 2022 and is expected to hit around USD 47.9 billion by 2032 poised to reach at a notable CAGR of 23.4% during the forecast period 2023 to 2032.

Though the tasks for a chat bot in healthcare are basic for now, the potential for them to be used as diagnostic tools and more is apparent. Even at this stage, they are helping reduce staff load and overhead costs, improve patient services, and provide a 24/7 conversation outlet.

User interface:

The number of times a chat bot can resolve the query, manage ticket, generate leads, or results in conversion determines its goal completion rate. However, like humans, bots, at times, might not be able to handle queries on their own. Such instances account for the fall-back rate of the bots.

Preparing for Chat GPT Integration:

1. Step 1: Obtain API Keys from Open AI. ...
2. Step 2: Technical Requirements and Considerations. ...
3. Step 1: Setup Open AI's Chat GPT API. ...
4. Step 2: Connect to the API. ...
5. Step 3: Add Chat GPT to Your Website's Backend. ...
6. Step 4: Create a Frontend for the Chat bot. ...
7. Step 5: Test the Integration.

A chat bot user interface (UI) is a series of graphical and language elements that allow for human-computer interaction. There are different types of user interfaces, chat bots being a natural language user interface. This means users can communicate on their terms, not the computer's.

Natural language processing:

NLP generally enables Conversational AI systems to comprehend user inputs and react to them in a human-like manner. These systems can deliver more accurate, context-aware, and natural conversations by utilizing NLP techniques, increasing user satisfaction, and enhancing usability.

It can be implemented using either supervised or unsupervised techniques. Perhaps the most common supervised technique to perform sentiment analysis is using the **Naive Bayes algorithm**. Other supervised ML algorithms that can be used are gradient boosting and random forest

7 levels:

There are seven processing levels:

1. Phonology
2. Morphology
3. Lexicon
4. Syntactic
5. Semantic
6. Speech
7. Pragmatic

Phonology identifies and interprets the sounds that makeup words when the machine has to understand the spoken language

Responses :

A bot response is a message your bot sends to the user. In Chat Bot, you can choose from 6 types of bot responses:

- Text
- Random Text
- Image
- Gallery (Carousel)
- Button
- Quick Reply

The bot displays responses in the same order you composed them. You can apply Filters to your bot responses to trigger them only when a condition is met. You can decide how fast your chat bot should respond to a user's question using the Delay feature

Integration:

How Do You Integrate A Chat bot?

1. Define the Applications.
2. Choose the Chat bot.
3. Finalize and personalize the actions.
4. Set up Sentiment Analysis.
5. Create a fallback response.
6. Including the Commonly Asked Questions section.
7. Put the Chat bot to the test.
8. Now it's time to put it to use.