**CREATE A CHATBOT IN PYTHON**

* **Install required libraries:**

We can use libraries like NLTK (Natural Language Toolkit) for natural language processing and Flask for creating a simple web-based chat interface.

Install:

Pip install nltk flask

* **Import modules:**

1. Python

2. Copy code

3. Import random

4. From flask import Flask, request, jsonify

5. Import nltk

6. From nltk.chat.util import Chat, reflections

* **Import modules**

Python

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Nltk.download(‘punkt’)

# Define chat pairs for the chatbot

Pairs = [

[

R”hello|hi|hey”,

[“Hello!”, “Hi there!”, “Hey! How can I assist you today?”]

],

[

R”how are you ?”,

[“I’m doing well, thank you!”, “I am just a chatbot, but I am here to help!”]

],

]

# Create a chatbot instance

Chatbot = Chat(pairs, reflections)

* **Create a Flask web application:**

Python

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App = Flask(\_\_name\_\_)

@app.route(“/”)

Def index():

Return “Welcome to the Chatbot!”

@app.route(“/chat”, methods=[“POST”])

Def chat():

User\_message = request.json[“user\_message”]

Response = chatbot.respond(user\_message)

Return jsonify({“bot\_response”: response})

If \_\_name\_\_ == “\_\_main\_\_”:

App.run(debug=True)

* **Run the Flask app:**

Python

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Python your\_app\_name.py

Our chatbot should now be running as a web application. We can send POST requests to the /chat endpoint with user messages, and it will respond with the chatbot’s reply.