Source code:

from flask import Flask, request, jsonify

import openai

import os

app = Flask(\_\_name\_\_)

# Load OpenAI API key from environment variable

openai.api\_key = os.getenv("OPENAI\_API\_KEY")

@app.route('/')

def home():

return "Welcome to the AI-Driven College Inquiry Chatbot!"

@app.route('/chat', methods=['POST'])

def chat():

user\_input = request.json.get("message")

if not user\_input:

return jsonify({"error": "No message provided"}), 400

try:

response = openai.ChatCompletion.create(

model="gpt-3.5-turbo",

messages=[

{"role": "system", "content": "You are a helpful college inquiry chatbot. Provide concise and accurate answers related to college admissions, courses, and facilities."},

{"role": "user", "content": user\_input}

]

)

return jsonify({"response": response['choices'][0]['message']['content']})

except Exception as e:

return jsonify({"error": str(e)}), 500

if \_\_name\_\_ == '\_\_main\_\_':

app.run(host='0.0.0.0', port=5000, debug=True)

**Steps to Run the Chatbot:**

**1.Install Required Libraries**  
Ensure you have Python installed, then install Flask and OpenAI’s library:

pip install flask openai

**2.Set Up OpenAI API Key**  
Set your OpenAI API key as an environment variable:

export OPENAI\_API\_KEY="your-api-key" # For macOS/Linux

set OPENAI\_API\_KEY="your-api-key" # For Windows (Command Prompt)

**3.Run the Chatbot**  
Save the script as app.py and start the Flask server:

python app.py

**4.Test the Chatbot**  
Open a new terminal and send a POST request using curl or Postman:

curl -X POST http://127.0.0.1:5000/chat -H "Content-Type: application/json" -d '{"message": "What courses does the college offer?"}'

**5.Expected Output (JSON Response)**

{

"response": "The college offers a variety of courses, including Computer Science, Business Administration, Engineering, and Humanities. Please check the official website for details."

}