

Cloud GPT Application – Project Summary

The Cloud GPT Application is a lightweight web-based interface built with Flask and integrated with OpenAI's GPT model (e.g., text-davinci-003). It allows users to interact with GPT directly through a browser-based chat interface.

Key Features:

1. Simple Web Interface:

A clean HTML form for sending messages.

JavaScript handles form submission and displays GPT's response dynamically.

2. Flask Backend:

Handles two main routes:

`/` : Renders the HTML frontend.

`/chat` : Accepts POST requests containing a message and returns the GPT-generated response.

3. OpenAI GPT Integration:

Accepts user input (prompt) via an API.

Sends it to OpenAI's GPT model (text-davinci-003) and returns a natural language response.

Uses max_tokens=150 to limit output length.

4. Error Handling:

Responds with appropriate error messages if no input is provided or if OpenAI API fails.

5. Example Dataset Entries (for testing or fine-tuning purposes):

```
{"prompt": "What is the capital of France?", "completion": "The capital of France is Paris."}
```

```
{"prompt": "Who wrote '1984'?", "completion": "George Orwell wrote '1984'."}
```

Technologies Used:

Python 3

Flask

HTML & JavaScript (vanilla)

OpenAI API (openai Python package)

How to Use:

1. Replace 'your-openai-api-key' with your actual OpenAI API key.
2. Run the app using:
`python app.py`
3. Open your browser and go to:
`http://127.0.0.1:5000/`
4. Type a message and get instant AI-generated responses.

Source code

Cloud gpt

```
From flask import Flask, request, jsonify, render_template_string
```

```
Import openai
```

```
Initialize Flask app
```

```
App = Flask(name)
```

```
Set your OpenAI API key here
```

```
Openai.api_key = 'your-openai-api-key' # Replace with your actual OpenAI API key
```

```
HTML template for the frontend
```

HTML_TEMPLATE = ``

<!DOCTYPE html> <html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Cloud GPT Application</title>

</head>

<body>

<h1>Cloud GPT Application</h1>

<form id="chat-form">

<input type="text" id="user-input" placeholder="Type your message here..." required>

<button type="submit">Send</button>

</form>

<div id="response"></div> <script>

Document.getElementById('chat-form').addEventListener('submit', function(event) {

Event.preventDefault();

Const userInput = document.getElementById('user-input').value;

Fetch('/chat', {

Method: 'POST',

Headers: {

'Content-Type': 'application/json',

},

Body: JSON.stringify({ message: userInput }),

})

```

        .then(response => response.json())
        .then(data => {
            Document.getElementById('response').innerText = data.response || data.error;
        })
        .catch(error => {
            Console.error('Error:', error);
        });
    });
</script>

</body>
</html>

''' Route for the home page

```

```

@app.route('/')
def home():
    Return render_template_string(HTML_TEMPLATE)

```

Route for handling chat requests

```

@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:

```
# Call OpenAI's GPT-3 API
```

```
Response = openai.Completion.create(
```

```
    Engine="text-davinci-003", # You can use other engines like "gpt-3.5-turbo"
```

```
    Prompt=user_input,
```

```
    Max_tokens=150
```

```
)
```

```
Return jsonify({"response": response.choices[0].text.strip()})
```

Except Exception as e:

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

Run the Flask app

If name == 'main':

```
App.run(debug=True)
```

Data set {"prompt": "What is the capital of France?", "completion": "The capital of France is Paris."}

{"prompt": "Who wrote '1984'?", "completion": "George Orwell wrote '1984'."}