

## APPENDICES

### APPENDIX A – source code

#### 1.Backend (Flask App)

```
from flask import Flask, request, jsonify

import openai

import requests

app = Flask(__name__)

openai.api_key = "your_openai_api_key"

GOOGLE_MAPS_API_KEY = "your_google_maps_api_key"

@app.route("/recommend", methods=["POST"])

def recommend():

    user_data = request.json

    preferences = user_data.get("preferences", "relaxing activities")

    response = openai.ChatCompletion.create(

        model="gpt-4",

        messages=[

            {"role": "system", "content": "You are a travel recommendation assistant."},

            {"role": "user", "content": f"Suggest a city with {preferences}."}

        ]

    )

    recommendation = response['choices'][0]['message']['content']
```

```

city = recommendation.split("is")[1].split(".")[0].strip()

maps_url

f"https://maps.googleapis.com/maps/api/geocode/json?address={city}&key={
GOOGLE_MAPS_API_KEY}"

location_data = requests.get(maps_url).json()

if location_data['status'] == "OK":

location = location_data['results'][0]['geometry']['location']

map_url

f"https://www.google.com/maps/search/?api=1&query={
location['lat']},{location['lng']}"

else:

map_url = None

result = {

"recommendation": recommendation,

"city": city,

"map_url": map_url

}

return jsonify(result)

if __name__ == "__main__":

app.run(debug=True)

```

## 2. Frontend (HTML + JavaScript)

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>AI Travel Recommendation</title>

</head>

<body>

<h1>AI-Powered Travel Recommendation</h1>

<form id="travelForm">

<label for="preferences">Enter your preferences:</label><br>

<input type="text" id="preferences" name="preferences" placeholder="e.g.,
    relaxing activities"><br><br>

<button type="submit">Get Recommendation</button>

</form>

<h2>Recommendation:</h2>

<p id="result"></p>

<a id="mapLink" target="_blank">View on Map</a>
```

```

<script>

document.getElementById("travelForm").addEventListener("submit", async
  (e) => {

e.preventDefault();

const preferences = document.getElementById("preferences").value;

const response = await fetch("/recommend", {

method: "POST",

headers: { "Content-Type": "application/json" },

body: JSON.stringify({ preferences })

});

const data = await response.json();

document.getElementById("result").innerText = data.recommendation;

const mapLink = document.getElementById("mapLink");

mapLink.href = data.map_url || "#";

mapLink.innerText = data.map_url ? "View on Map" : "Map not available";

});

</script>

</body>

</html>

```

## APPENDIX B – screenshot



suggest me a city that has lot of relaxing activities



A great city known for its relaxing activities is 📍 **Kyoto**. This city offers a serene atmosphere with its beautiful gardens, traditional tea houses, and historic temples. You can enjoy peaceful strolls through places like the 🌿 **Arashiyama Bamboo Grove**, visit the 🏯 **Kinkaku-ji (Golden Pavilion)**, or experience a traditional 🍵 **Japanese tea ceremony**. If you're interested in exploring more options, let me know!

Message Mindtrip

