

Vacation Itinerary AI Generator

<https://github.com/ViktorVelizarov/vacation-planner/tree/ItineraryGenerator>

Intro

A feature that generates a vacation plan/itinerary with a given destination name and days from the user, by using OpenAI's generative GPT model.

Backend

The backend of this feature consists of a single API endpoint **/GetItinerary** where I make a request to the OpenAI generative model and return the generated result. The {days} and {destination} values are taken as URL parameters:



```
1 export default defineEventHandler(async (event) => {
2   try {
3     const query = getQuery(event)
4
5     const response = await fetch('https://api.openai.com/v1/completions', {
6       method: 'POST',
7       headers: {
8         'Content-Type': 'application/json',
9         'Authorization': `Bearer ${process.env.OPENAI_API_KEY}`
10      },
11      body: JSON.stringify({
12        model: "gpt-3.5-turbo-instruct",
13        prompt: `Make me a vacation itinerary for a ${query.days} day vacation in ${query.destination}
14        temperature: 1,
15        max_tokens: 3886,
16        top_p: 1,
17        frequency_penalty: 0,
18        presence_penalty: 0,
19      })
20    });
21  }
```

The prompt sent to the gpt-3.5-turbo AI model is:

```
Make me a vacation itinerary for a ${days} day vacation in
${destination} with the names of destinations and places to eat for
each day
```

The result looks like this:

POST

http://localhost:3000/api/GetItinerary?days=4&destination=Paris

Params • Authorization Headers (8) Body Pre-request Script Tests Settings

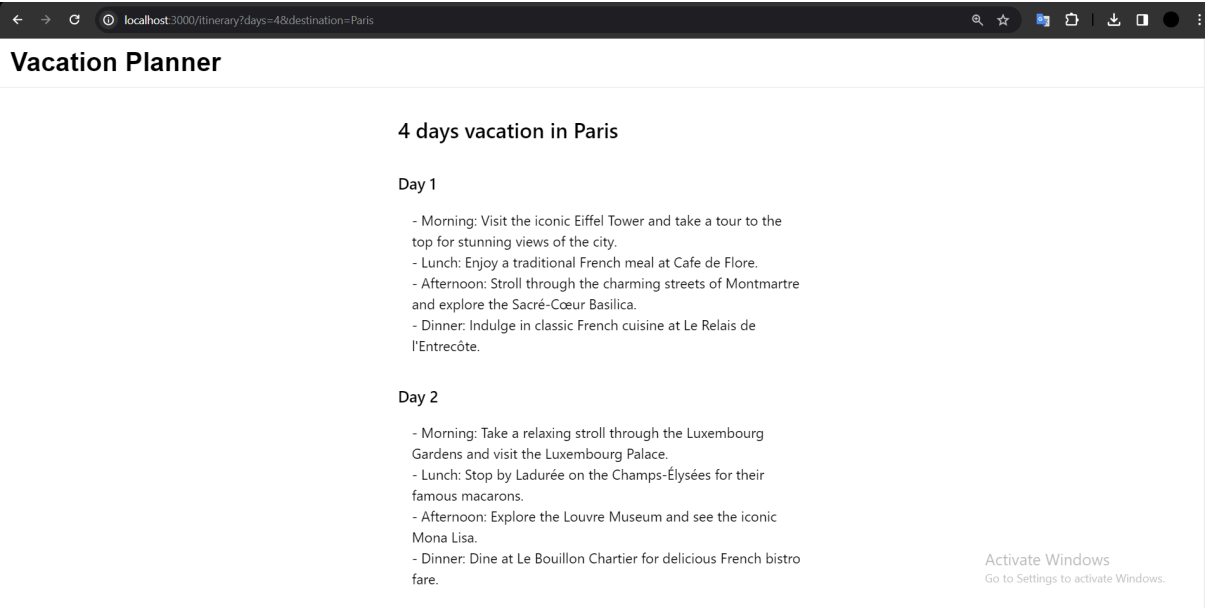
Body Cookies Headers (4) Test Results

Pretty Raw Preview Visualize HTML

```
1 Day 1:
2 - Arrive in Paris at Charles de Gaulle airport
3 - Check into hotel in the heart of the city
4 - Lunch at Le Caméléon, a charming bistro in the 1st arrondissement
5 - Afternoon visit to the Louvre Museum to see iconic works such as the Mona Lisa and Venus de Milo
6 - Stroll through the romantic Jardin des Tuileries
7 - Dinner at the famous Le Procope, one of the oldest restaurants in Paris
8 - Admire the sparkling Eiffel Tower at night before heading back to the hotel
9
10 Day 2:
11 - Breakfast at Café de Flore, a literary institution in the artistic neighborhood of Saint-Germain-des-Prés
12 - Explore the charming streets and boutique shops in Montmartre
13 - Visit the stunning Sacré-Cœur Basilica for beautiful views of the city
14 - Lunch at Au Pied de Cochon for a classic French onion soup
15 - Afternoon visit to the iconic Notre-Dame Cathedral
16 - Enjoy a sunset river cruise along the Seine River
17 - Evening at the Moulin Rouge for a traditional cabaret show and dinner
18
19 Day 3:
20 - Take a day trip to the enchanting Palace of Versailles and explore the opulent gardens
21 - Lunch at Angelina, a luxurious tea room known for its hot chocolate and pastries
22 - Visit the Arc de Triomphe and stroll down the famous Champs-Élysées
```

Frontend

The front end of this feature consists of a simple Vue page that gets the AI-generated itinerary from the **/GetItinerary** backend endpoint and displays it on the page:



Also, there are input fields on the main page where the user can input days and destination names and then be redirected to the Itinerary Page, with the 2 parameters being sent as query parameters

Submit Itinerary Details

Number of Days:

Destination:

Submit



localhost:3000/itinerary?days=3&destination=Amsterdam

Closing

All the code can be found here:

<https://github.com/ViktorVelizarov/vacation-planner/tree/ItineraryGenerator>

If you want to run the code on your system just make sure to add a **.env** file with these contents:

```
OPENAI_API_KEY = sk-bZUxkEi4CPTz8Yqt2VqST3B1bkFJ1qWsjiap9IuJQudRegWA
TRIPADVISOR_API_KEY = 33CC974010DE44B792B1EC3423F05573
```