

WEB X CA- Report

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Grade:	

Title: TrippyTally

Project Description:

This GEN-AI based full-stack web application is designed to help users effortlessly calculate travel expenses between cities using various modes of transport based on their preferences. It leverages cutting-edge technologies, including React-Vite for the frontend, Flask for the backend, Gemini API for the generative AI model, and MongoDB Atlas as the database, ensuring a seamless and efficient experience. Users can input source and destination cities and select their preferred mode and type of transport to get instant fare estimates tailored to their travel needs.

The application boasts a variety of user-friendly features, such as real-time cost estimates and a history tab for accessing previous calculations. It also offers filtering options for past estimates based on source, destination, and mode of transport, making it easier for users to find relevant information. With data caching implemented, repeated queries are processed faster for an enhanced user experience. This project is a perfect blend of modern technologies and practical functionality, catering to the diverse travel requirements of users.

Technology Stack:

- 1. Frontend:** React-vite, CSS
- 2. Backend:** Flask
- 3. DataBase:** MongoDB Atlas
- 4. APIs:** Gemini AI API
- 5. Development Tools:** VS Code Postman, Git, Github

Features:

1. Calculate travel expenses for different transportation modes:

Bus (Private AC, Private Non-AC, State Transport)

Train (Sleeper, 3AC, 2AC, 1AC)

Airways (Economy, Business)

Car (Petrol, Diesel)

2. View cost estimates in real-time
3. Access travel expense history
4. Filter previous estimates by source, destination, and mode
5. Data caching for faster repeat queries

Github Link: <https://github.com/SiddhantSathe/TrippyTally>

Output:

Travel Expense Calculator

Calculate approximate travel expenses between cities

Calculator History

From:

To:

Transport Mode:

Airways

Airways Class:

Economy

Calculate Expense

Estimated Travel Expense

₹6500

This is an approximate expense based on current rates.

Travel Expense Calculator

Calculate approximate travel expenses between cities

Calculator History

Recent Travel Expenses

Source:

Destination:

Transport Mode:

All modes

From	To	Mode	Details	Fare (₹)	Date
kolkata	mumbai	airways	Class: economy	₹6500.0	10 Apr 2025, 02:49 pm
chennai	pune	car	Fuel: petrol	₹8240.0	10 Apr 2025, 12:49 pm
mumbai	chennai	train	Train: 2ac	₹900.0	10 Apr 2025, 12:38 pm
mumbai	pune	bus	Bus: private ac	₹700.0	10 Apr 2025, 12:34 pm

travel_expense_db.travel_records

STORAGE SIZE: 36KB LOGICAL DATA SIZE: 408B TOTAL DOCUMENTS: 3 INDEXES TOTAL SIZE: 36KB

[Find](#) [Indexes](#) [Schema Anti-Patterns](#) 0 [Aggregation](#) [Search Indexes](#)

Generate queries from natural language in Compass

[Filter](#) Type a query: { field: 'value' }

QUERY RESULTS: 1-3 OF 3

```
_id: ObjectId('67f76d827103d81ececebee7')
mode: "bus"
busType: "private ac"
destination: "pune"
source: "mumbai"
fare: "700.0"
timestamp: 2025-04-10T12:34:16.236+00:00
```

```
_id: ObjectId('67f76e977103d81ececebee8')
mode: "train"
source: "mumbai"
trainClass: "2ac"
destination: "chennai"
```

Conclusion:

This AI-powered travel expense calculator seamlessly combines advanced technology with practical functionality, offering real-time cost estimates, detailed history filtering, and rapid data caching to simplify travel planning. Built with modern tools like React-Vite, Flask, Gemini API, and MongoDB Atlas, it ensures an efficient and personalized user experience for diverse transportation preferences.

The major issue I encountered during this project was that, even though everything was properly connected, the connection to MongoDB was not established. I resolved this by changing the DNS server.