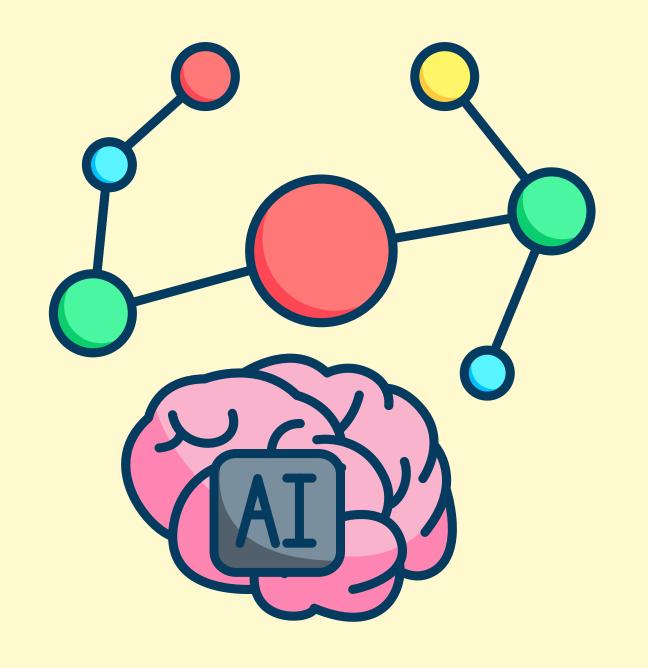
## Hypermode Knowledge Graph + AI Challenge

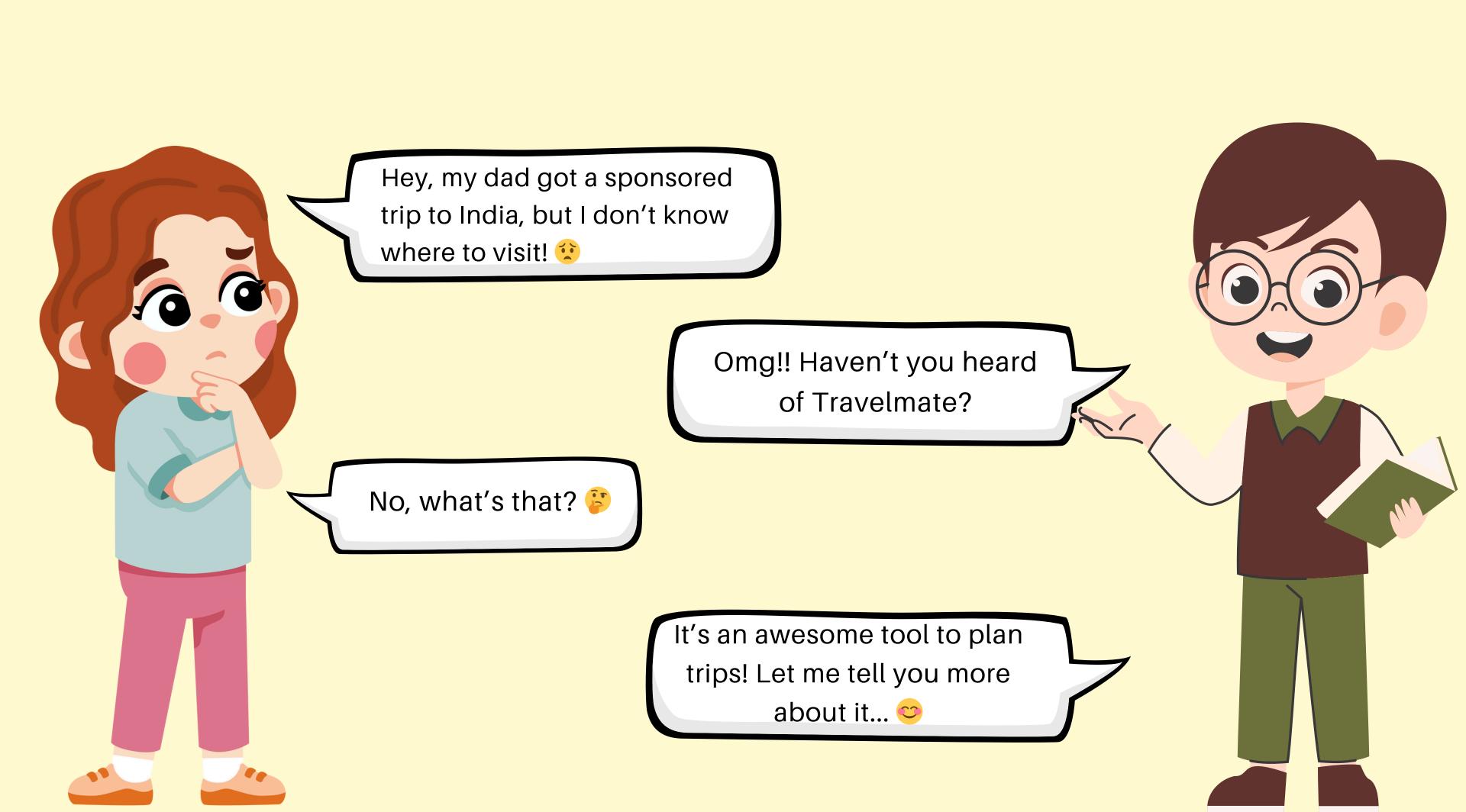
Building a model-native app using knowledge graphs and the open source Modus API framework



Team

## TravelMate

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## Problem analysis and breakdown

## The Challenge

- 1. Deciding where to visit is tough due to a lack of reliable, personalized, and relevant travel information.
- 2. Trusted platforms give generic recommendations, often missing personal preferences.
- 3. Personalized tools are scarce and fail to fully match unique interests.

## The Need

- 1. A smart tool to deliver customized, trustworthy itineraries.
- 2. Must combine user preferences (dates, regions, interests) with real-time, accurate data.
- 3. A seamless solution for tailored travel experiences.



Travelmate is a smart travel planning tool designed to enhance your journey. Whether you're visiting a city or exploring a new country, Travelmate helps you discover the best places to visit.

## **Personalized Picks**

It suggests places to visit within a city / country based on your preferences, mood, and the type of place you enjoy e.g., historical, relaxing or adventurous

# 1

## **Destination Insights**

It offers details about popular attractions, hidden gems, and must-visit spots in any location.



**Key Features** 



It offers a Itenary planned on the basis of world-data to help users start their day off smartly.





## Key Components Used

### **Hypermode**

Hypermode is a managed service that provides the workbench and infrastructure to create powerful, engaging, and secure AI assistants, APIs, and backend services.

**Modus** 

Modus is an open source, serverless framework for building functions and APIs, powered by WebAssembly.

### Neo4J

A graph database that uses the **Cypher** query language to perform **CRUD** (Create, Read, Update, Delete) operations on graphbased data. It enables seamless handling of relationships between data points.

## **Knowledge Graph**

A structured database that connects and organizes information about places, moods, and user preferences. It powers our recommendation engine by linking relevant data and generating insightful travel suggestions.

## APPROACH PIPELINE:

## Step 4

Provide tailored travel suggestions based on the queried knowledge graph.

## Step 1

01

03

User Inputs details like mood, preferences, or destination ideas.

## Step 2

The input is sent to the system's gate to determine if the location has been searched before or not.

## Step 3(b)

If NO,

Create a knowledge graph of that location.

04

2. Then, implement the RAG (Retrieval-Augmented Generation) solution to query on the knowledge graph

## Step 3 (a)

02

If **YES**, implement a RAG (Retrieval-Augmented Generation) solution to query on the knowledge graph

