



VOYAGEHACKS

Unleash travel innovation

Topic: Mashups - Packages, Calendar, Itineraries (Generative AI)

Team: Trek Tribe



PROBLEM STATEMENT



The traditional approach to travel planning poses several challenges:

- Complex decision-making, time-intensive research, and the risk of overlooking optimal options.
- Impacts individual travelers and also creates friction for travel partners aiming to deliver exceptional experiences.
- The one-size-fits-all approach in conventional travel planning fails to address the unique preferences and needs of individual travelers, often resulting in generic itineraries.
- The integration of AI presents a transformative opportunity to address these pain points and enhance the overall travel planning experience for individuals and travel partners alike.



EVOLUTION OF TRAVEL PLANNING



IN-PERSON TRAVEL SERVICES



ONLINE PLATFORMS &
VIRTUAL CONSULTATIONS



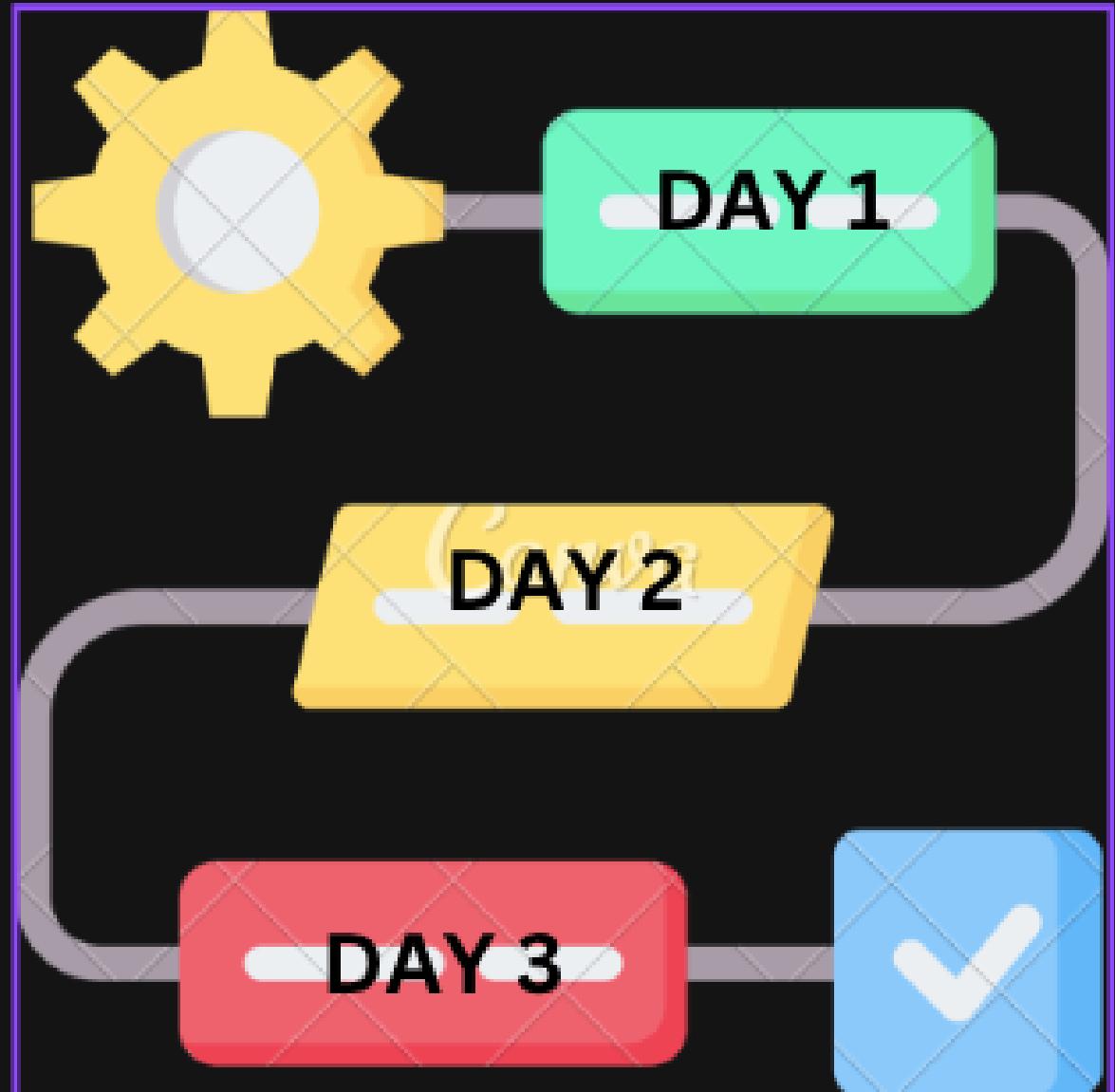
AI POWERED SOLUTIONS

SOLUTION



- Our solution begins with a straightforward user prompt, where the traveler provides basic details about their desired destination. Using the power of AI, we generate an initial GUI-based interactive workflow that visually represents the travel itinerary.
- Users can seamlessly edit this visual representation through the GUI, adjusting parameters such as budget constraints and incorporating additional constraints like their pre-planned meeting schedules, Arrival/Departure times, and activity preferences. Using simple prompts, user can refine their day-wise flows and activities.
- We leverage real-time TBO APIs to fetch relevant and up-to-date data related to the user's refined itinerary, including flight and hotel information. This data is then fed into a machine learning model API, enhancing the itinerary further.
- The iterative process continues until the traveler is satisfied, creating a feedback loop that refines the itinerary based on continuous user input.

KEY FEATURES



AI-GENERATED WORKFLOWS

By providing fundamental details such as the destination and user preferences, our AI system dynamically generates a comprehensive workflow presented in an aesthetically pleasing graphical user interface.

VISUAL PLANNER

An intuitive interface where travelers can effortlessly refine/edit their AI-Generated itineraries. Featuring dynamic day-wise flows, price filter sliders, and calendar pop-ups, it provides unparalleled flexibility, allowing users to tailor their journeys precisely to preferences and budgets.

RECOMMENDER SYSTEM



Leveraging AI and machine learning, to offer personalized itinerary recommendations based on their browsing history, preferences, and behaviors and evolving travel trends.



SMART PROMPT GENERATION

AI-driven prompt generation based on user edits, ensuring that the system adapts to personalized changes in the itinerary. Smart suggestions for activities, dining, and attractions aligned with user preferences.

REAL-TIME COST OPTIMIZATION



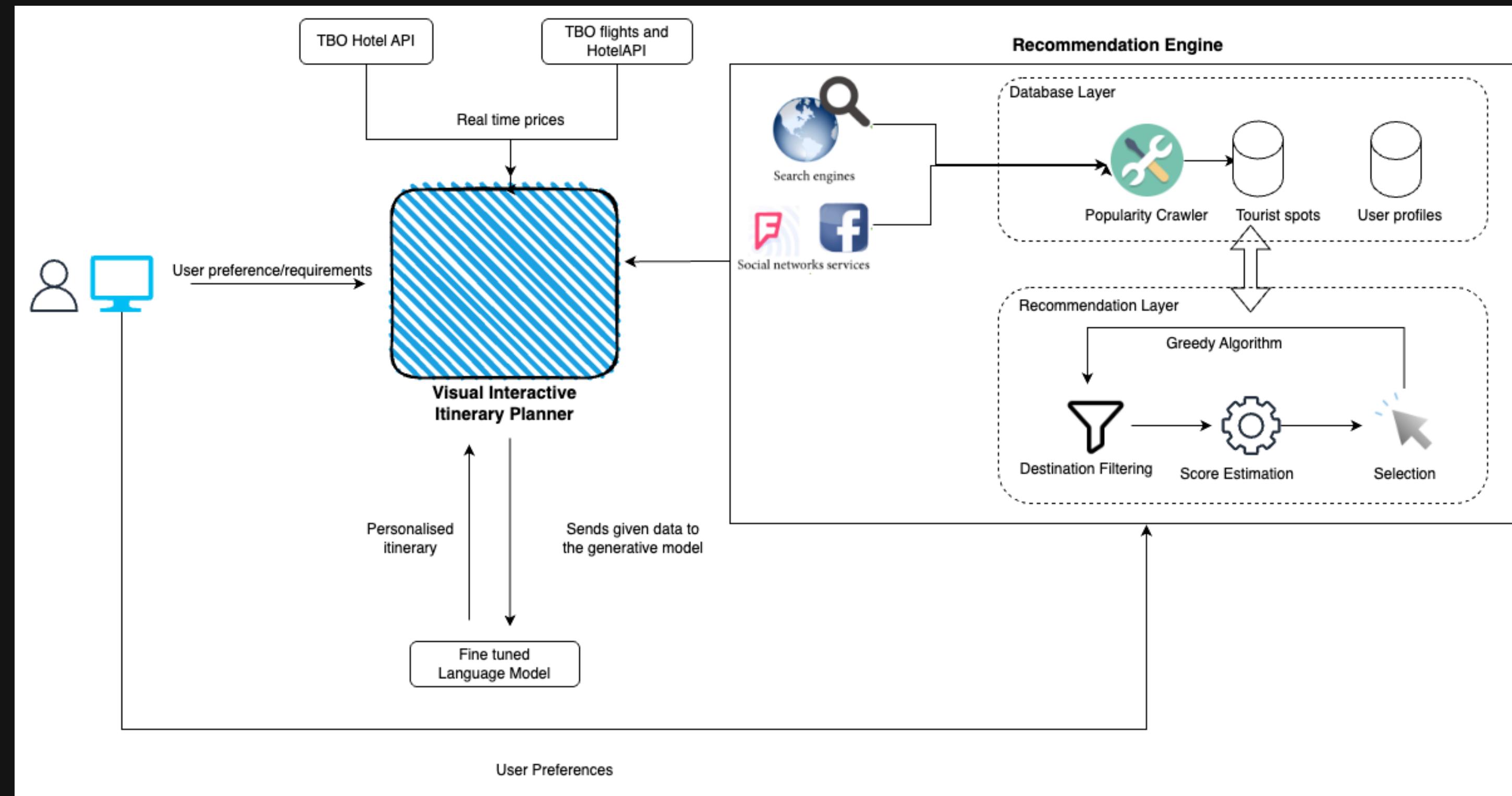
Provides real-time cost estimates for flights, hotels, and activities, allowing users to make budget-conscious decisions. Alerts users to potential cost-saving options and promotions.



SEAMLESS API INTEGRATION

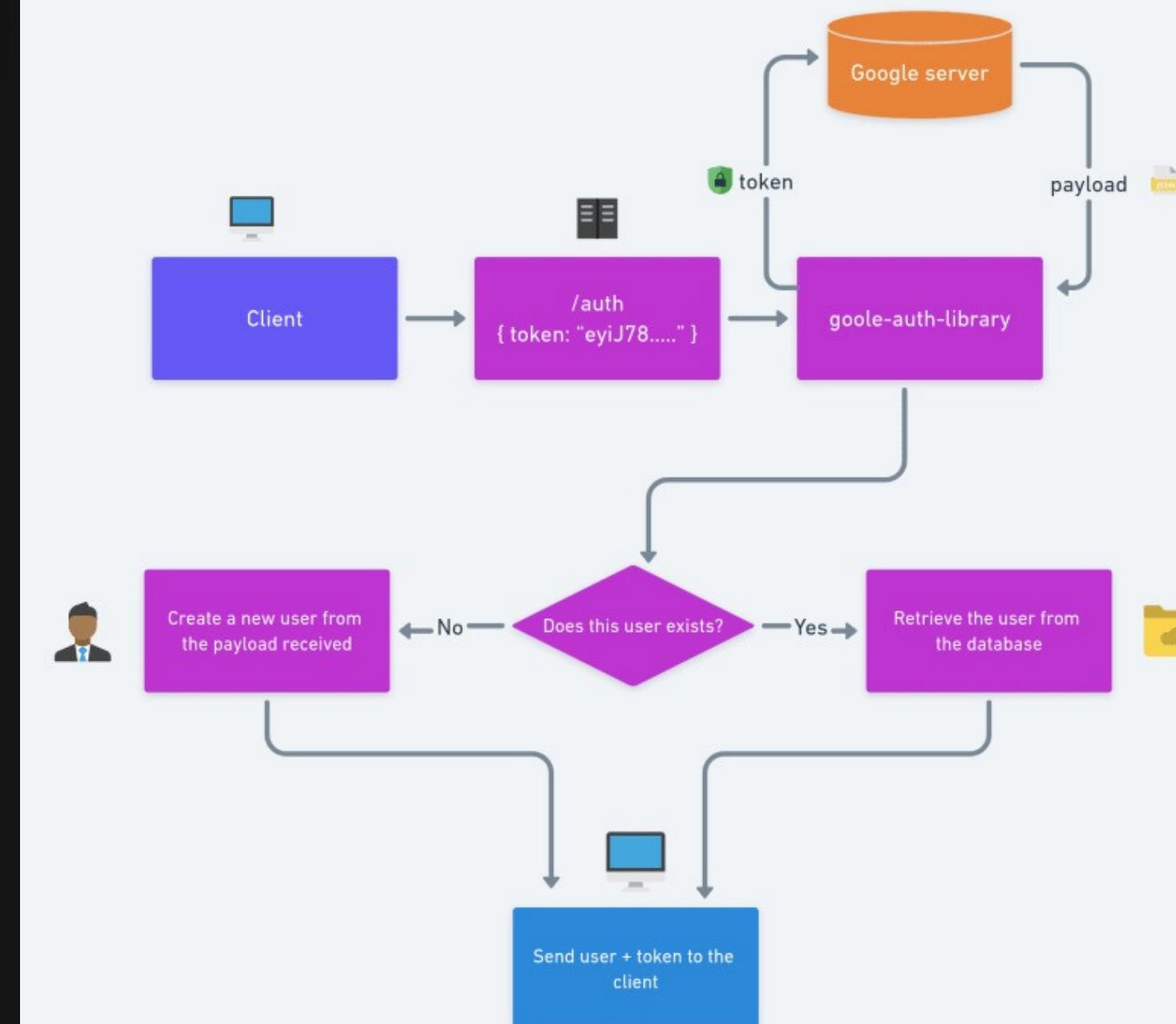
Integrates seamlessly with TBOs travel APIs, utilizing Air and Hotel Postman Collections, for real-time access to flight and hotel data. Ensures accurate and up-to-date information for users to make informed decisions.

TECHNICAL ARCHITECTURE

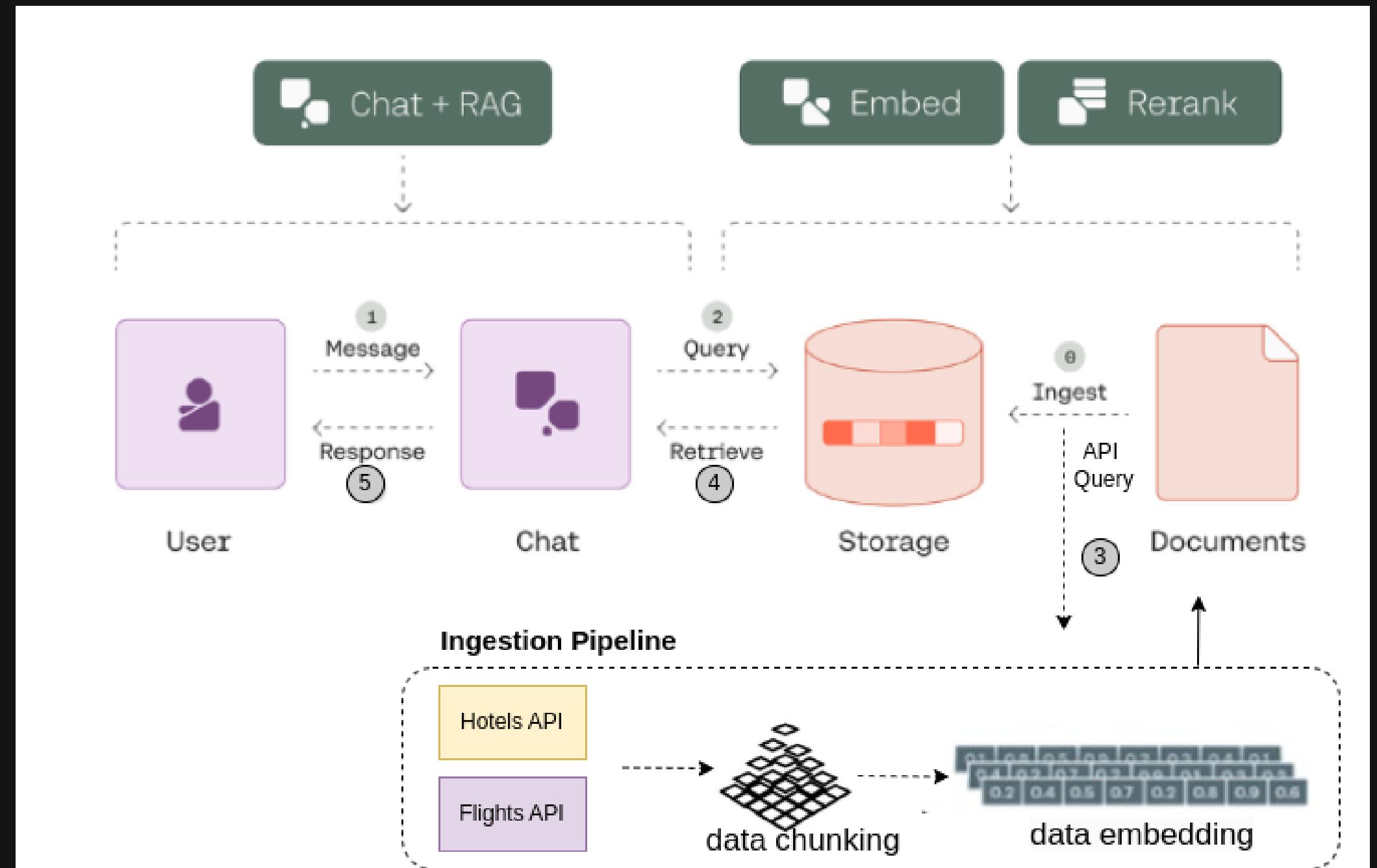


OAUTH ARCHITECTURE

Flowchart



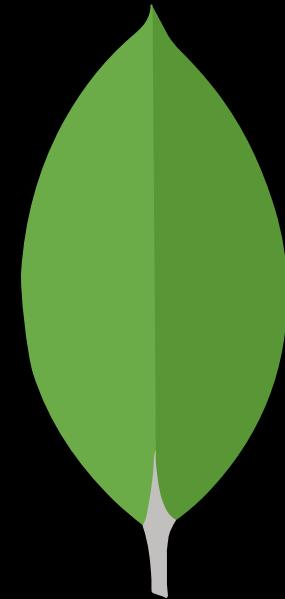
RAG CHATBOT



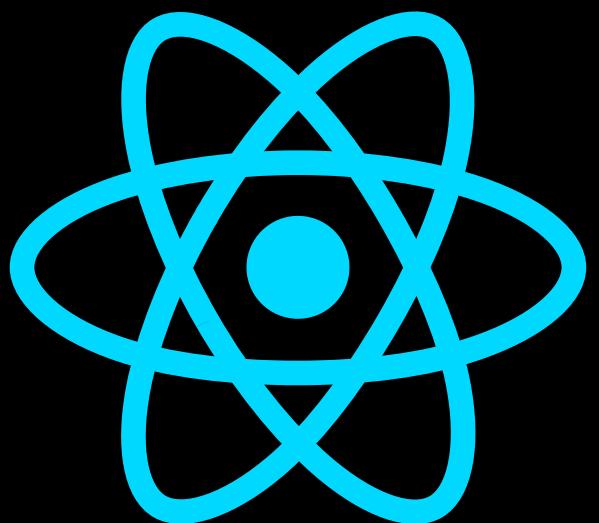
TECHSTACK



TECKSTACK



mongoDB



React



OpenAI



DATA API'S



weather
api



MARKET OPPORTUNITY

While the tourism sector experienced a temporary decline in revenue due to the impact of COVID, the forecast indicates a clear upward trajectory, signaling an anticipated increase in revenue.



01. Growing Demand for Personalized Travel Experiences

- According to a global survey(2021) Booking.com, identified a rising demand for customizable experiences, with 80% of travelers expressing interest in personalized travel recommendations.
- MasterCard's [survey](#) says Organizations that can deliver a unique in-person experience have an edge over the competition

02. Rising Need for Efficient and Streamlined Travel Planning

In a [survey](#) conducted by Expedia, travelers spend over 5 hours researching trips on average. This highlights the time-intensive nature of traditional travel planning.

MONETIZATION

Subscription-based Model for Premium Features

Offer tiers of subscription plans (Basic, Premium, etc.) granting access to advanced features, personalized recommendations, and exclusive content.

Partnerships and Commission-based Referrals:

Collaborate with airlines, hotels, and activity providers to earn commissions through referrals and bookings made via the platform.



API Integration and Licensing:

License the platform's APIs to other platforms seeking AI-driven travel planning capabilities, possibly incorporating revenue-sharing models with partners.

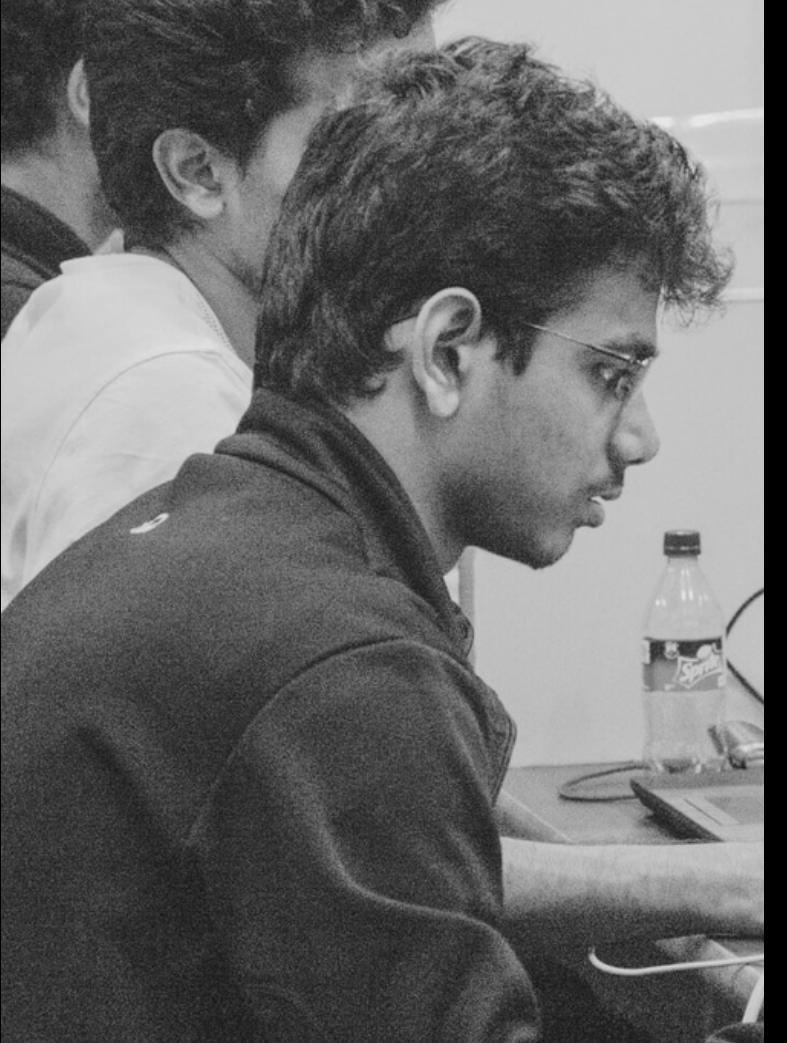
Data Monetization and Insights

Utilize anonymized user data insights to offer trend analysis and personalized marketing options to industry stakeholders.

Advertising and Sponsored Placements:

Generate revenue through sponsored placements of hotels, activities, or travel-related services within the platform, catering to user preferences.

OUR TEAM



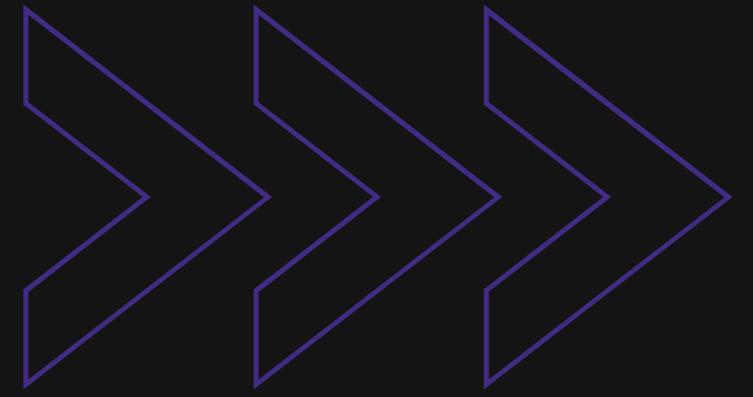
**Hardik
Khandelwal**



**Chaitanya
Manas**

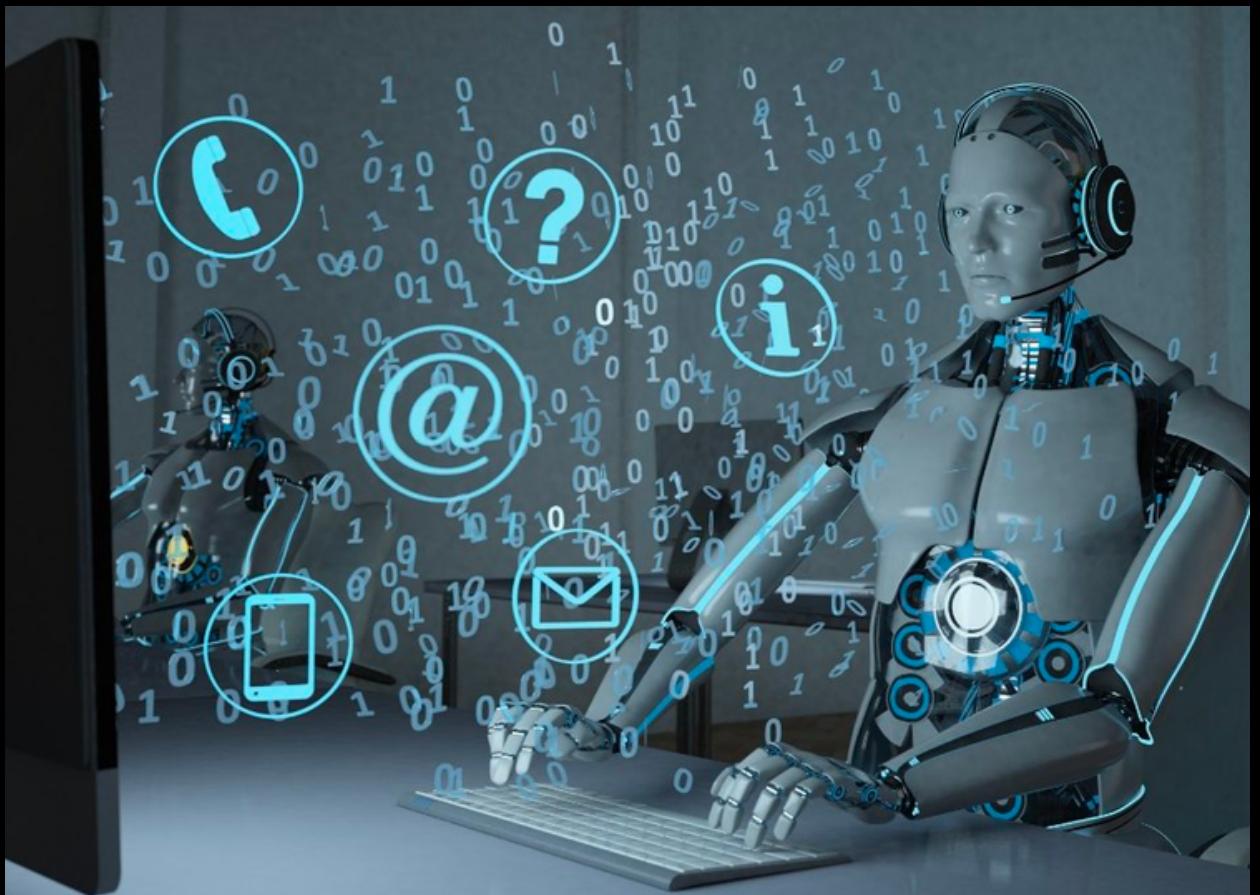


**Shivankar
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THANK YOU

INTRODUCTION



Travel planning has long been a meticulous and time-consuming process, often requiring travelers to navigate through a myriad of options for flights, hotels, and itineraries. As we step into an era where AI is revolutionizing various aspects of our lives, it's time to leverage its power to streamline and enhance the travel planning experience. We present an AI-based itinerary creator that transforms travel planning into a quick, efficient, and personalized experience.

