



unthinkable

Success Story

Developing an AI-based travel planning application for a travel services company in the US

Customer

Leading travel provider in the U.S.

Country

United States

Industry

Travel & Tourism

About the Client

The client is a US-based travel services provider aiming to transform the way people plan their journeys. With a deep passion for delivering seamless, personalized, and memorable travel experiences, the client offers travelers an intuitive and user-friendly solution through its AI-based trip planner. Their platform offers tailored itineraries, curated experiences, and real-time recommendations for travelers according to their interests, preferred dates, destinations, budget, and other factors.

Tech Stack



Business Situation: Reimagining Travel Planning

In today's fast-paced travel industry, planning a trip can be a daunting task. Travelers spend hours researching destinations, creating detailed itineraries, and trying to stick to a budget. This process is not only time-consuming but also frustrating. To make matters worse, traditional tour guides and travel agencies often focus on their own commission-driven partnerships, limiting travelers' opportunities to enjoy authentic and personalized experiences.

Recognizing these industry limitations, our client envisioned a gen AI-based travel planning platform that would transform how people approach travel. The core objective was to develop a cutting-edge solution that could help travelers create dynamic, personalized travel plans based on their preferences and empower them with greater autonomy and exploration potential.

To transform this ambitious vision into reality, the client partnered with Unthinkable Solutions. This decision was a testament to Unthinkable's expertise and ability to deliver solutions that meet the unique needs of its clients.

Unthinkable Solutions was required to:

- ✔ Validate the client's concept by developing a market-fit MVP
- ✔ Design an intuitive UI/UX interface that caters to the diverse needs and preferences of travelers.
- ✔ Develop a user-friendly platform that leverages Gen-AI to deliver tailored recommendations and itineraries based on individual user preferences, interests, and budgets.
- ✔ Enable seamless integration with popular platforms to provide real-time information and recommendations.
- ✔ Launch an MVP in less than 2 months and gather user feedback for further enhancements.

The Solution

Team Unthinkable kickstarted the project by collaborating with the client to understand their needs, pain points, and expectations from the solution. Our team meticulously documented these insights, creating a detailed requirements matrix that would serve as the blueprint for developing the application.

We conducted extensive user research to tackle the challenges associated with traditional travel planning and understand travelers' needs and expectations. This included surveys, interviews, and competitor analysis. Based on the same, we defined user profiles and personas which helped us with our design process.

Next, wireframes and high-fidelity prototypes were created to visualize the look and feel of the application. Once the designs were developed, in-depth user experience testing was performed by the team to validate the design and functionality of the application before starting the development phase.

The final web application was built using Node JS for the backend and React JS for the frontend. For all generative AI needs we used Open AI's GPT-3.5 version, for its ability to generate human-like responses and effectively handle user inputs.

Making 'planning' the easiest part of user journey:

To enable seamless trip planning, Team Unthinkable designed an interactive questionnaire on the platform. Each question is displayed one at a time, where travelers have to simply click and choose amongst the given options – based on which, a customized itinerary is displayed to them. The questionnaire is designed in a way that it doesn't overwhelm the user with too much typing. Instead, users can have a detailed itinerary in just a few clicks.

Offering seamless integration and scalability:

To ensure the recommendations were relevant and reliable, the application was integrated with travel platforms like Expedia and Skyscanner, weather APIs, Google Maps, and local event services such as Eventbrite to offer real-time suggestions to travelers based on their chosen preferences.

Team Unthinkable utilized microservices architecture allowing for independent scaling of core services such as itinerary generation, destination recommendation, etc. This ensured smooth operations even when demands fluctuated, especially during peak travel seasons.

The app leveraged horizontal scaling by distributing requests through autoscaling groups and load balancers. Its NoSQL database efficiently handled large datasets with replication and distribution.

Through extensive prompt engineering, Team Unthinkable enabled travelers to receive personalized travel plans, segmented by day, budget, and additional recommendations.

Enabling personalized suggestions and recommendations:

Recommendations for Activities, Attractions, and Experiences: Travelers receive curated recommendations for local activities, must-see attractions, and unique experiences based on their selected destination and travel preferences. Whether it's an adrenaline-packed adventure or a serene musical that a traveler wishes to attend, the application tailors its suggestions according to received responses.

Hotel and Accommodation Recommendations: Keeping in mind the user's budget, choice of destination, and type of vacation, the application suggests a range of accommodation options including boutique & luxury hotels, resorts, and short-term rentals like Airbnb. The recommendations are designed to ensure comfort, convenience, and proximity to key attractions, offering a memorable stay for users.

Total Estimated Budget: The application provides a total estimated budget per person for the trip, including accommodation, transportation, activities, meals, and other expenses. This feature helps users plan their spending in advance, ensuring they stay within their financial limits while still enjoying all the experiences. The entire itinerary is shareable via email or a unique link that users can refer back to anytime, anywhere. This can also be shared with friends, family members, or fellow travelers to ensure everyone is on the same page and has the same details. Additionally, one can also export the same to PDF, or other formats for easy offline access.

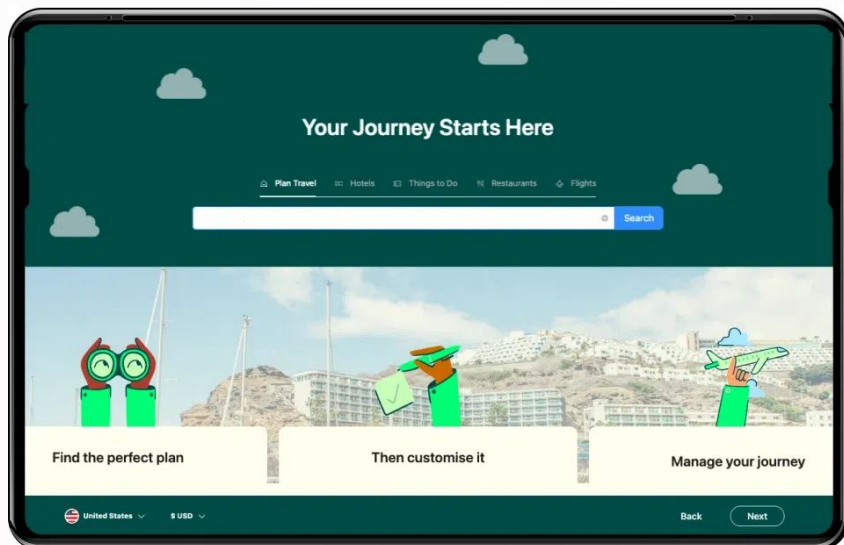
The Impact

The success of the client's solution is a testament to Team Unthinkable's dedication and hard work. The MVP of the application was developed & launched within a short span of just 2 months. Compared to traditional methods, the AI-powered recommendations helped thousands of users reduce the average planning time to less than 10 seconds and have access to a personalized itinerary planner anywhere they go. Through budget transparency, users were able to plan better and have full control over the activities and events they wished to be a part of.

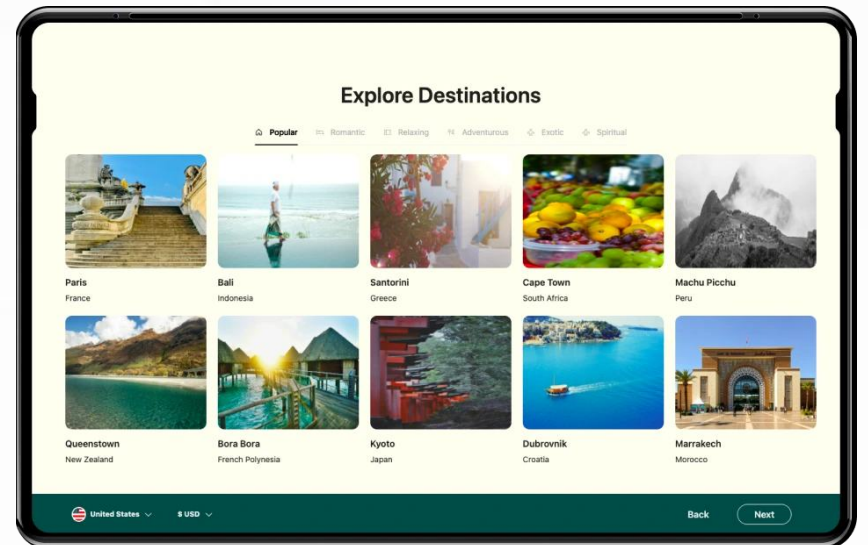
Witnessing the success of the MVP, the client has engaged Team Unthinkable in further feature enhancements and expansion.

<10s	Average planning time
20k	Active users on the platform
50k	Itineraries planned

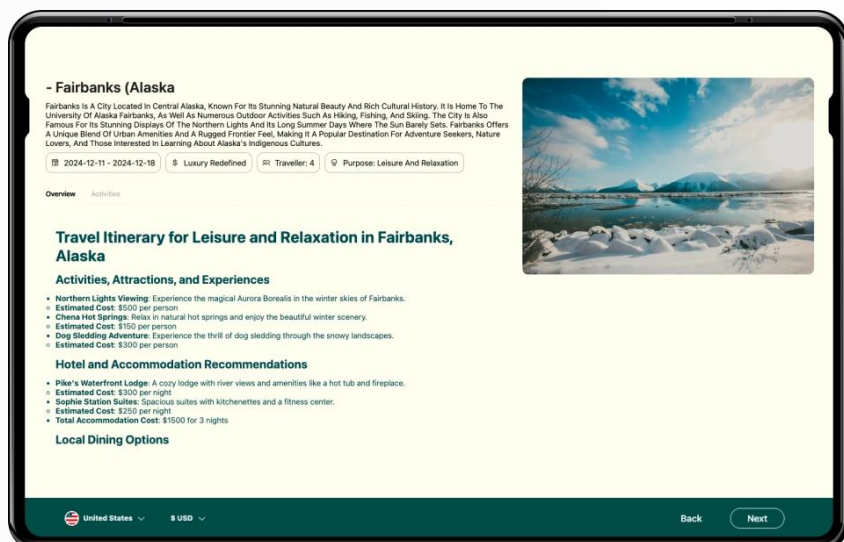
Product Snapshots



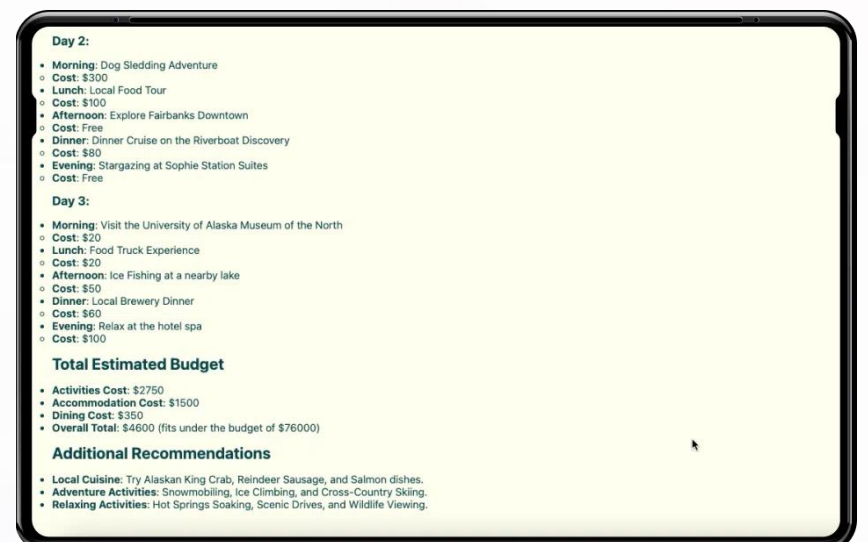
Application Home Page



Destination Recommendations



Activities & Hotel Recommendations



Custom Itinerary with Total Estimated Budget

Is there a digital platform you want to build or take to the next level?

Setup a personalized consultation with our technology expert.

Let's Talk