

State of the Art

Modern itinerary planning apps leverage AI, big data, and recommendation systems to create personalized travel plans. Unlike traditional static tools, these apps adapt to user preferences, real-time conditions, and optimization constraints. This section explores the state of the art in itinerary generation, highlighting key technologies and challenges.

Mindtrip

[Mindtrip.ai](#) is an AI-driven travel platform that generates personalized itineraries based on user preferences, integrating real-time recommendations for accommodations, activities, and transportation. It leverages conversational AI and extensive travel data to streamline trip planning.

Trip Planning

MindTrip is an advanced trip planning platform that uses a chat-based interface to help users design personalized travel itineraries easily. It allows both registered and guest users to plan trips without the need for mandatory account creation. Each chat session is associated with a unique trip, providing an organized and focused planning experience. The primary interaction mode is through a chatbot, which resembles the interface of ChatGPT. Users can receive travel suggestions, refine their plans, and get location-specific recommendations directly via chat.

The platform offers various customization options, allowing users to specify trip dates, the number of travelers, and a budget range. Budget options are simplified through a selection box with four ranges, aligning the plan with financial constraints effortlessly, although not being precise on the choice of budget. MindTrip also integrates Google Maps API to display map tiles and enable users to explore attractions near their destination. Besides the chat-based suggestions, users can search for places independently through a dedicated function that displays ratings, cost indicators, and an option to add locations directly to the itinerary. A “Favorites” tab is available for users to save and revisit preferred spots.

The frontend of the platform is built using the Next.js framework, ensuring a responsive and high-performance user experience. Google Maps API powers the mapping services, offering location data and additional features such as budget ranges and place ratings. Although the specific chatbot model is not disclosed, there are indications that it may be an extension of OpenAI’s ChatGPT model, inferred from the chatbot’s responses and developer hints.

Zone Setting

[Mindtrip.ai](#)’s chatbot allows users to define a specific geographic zone as context for travel recommendations, meaning you can tell the AI to focus on a certain area (city, neighborhood, or radius) when suggesting places. In practice, this might be as simple as

specifying where you're staying or the area you want to explore – for example, asking “What restaurants are near my hotel?” will cue Mindtrip to filter recommendations to that vicinity.

The platform's design combines conversational AI with geospatial data, so it understands location context and incorporates it into its suggestions. In fact, Mindtrip's data pipeline explicitly takes geographic areas into account when generating results, ensuring that the recommendations you see are relevant to the zone you've set.

Group Trips

[Mindtrip.ai](#)'s group trips feature works in such a way that the only differential from solo travels is the Group Chat that appears on the UI. The flow used to create a solo trip is the exact same, only here it has two or more people with direct input on how the trip is going to come out

ChatBot

Itinerary Planning Capabilities

Mindtrip's AI design is tailored to produce full itineraries with a high degree of personalization. This ChatBot can be prompted to give out a full itinerary generated by a single prompt or a guided conversation, but he can also just give out points of interest and recommendations, producing a “*must-see, must-do and must-eat lists*” for a specified destination. This is also coupled with the ability to mutate the itinerary more to the users liking through more conversation and prompts.

General Travel Assistant Functions

As well as itinerary creation, Mindtrip allows for a comprehensive travel search that helps users see to a filtered lens the best options available to them according to preferences they prompted before, aiding in decision making. Besides that it also has external links to booking websites and in-app reviews of places you have been to.

[LaylaAI](#)

LaylaAI is an AI-powered chatbot designed to assist users in planning trips by providing real-time recommendations, answering travel-related questions, and guiding users through the itinerary creation process. The chatbot aims to deliver a conversational interface for seamless travel planning, leveraging natural language processing (NLP) to personalize responses.

ChatBot

Itinerary Planning Capabilities

Layla chatbot can generate complete travel itineraries tailored to user input. While in a conversation Layla often asks for trip details to then produce a multi-day itinerary with recommended attractions, accommodations and travel routes. Users can also refine these itineraries by chatting after it was created. Overall, Layla's AI excels at itinerary generation and personalization through natural dialogue.

General Travel Assistant Functions

Beyond itineraries Layla can also serve as a broad travel assistant, having integrated bookings, destination advice and integrating along with the text inspiring videos, images and even user reviews. With these extras LaylaAI stands out from other normal trip planning applications.

WonderPlan

Trip Planning

WonderPlan is a simpler alternative that focuses on a streamlined trip planning process without a chatbot. It guides users through a straightforward questionnaire to collect trip preferences quickly and efficiently, allowing trip planning without account creation. Users are prompted to specify their destination, travel dates, duration, budget range (with three options: Low, Medium, and High), travel companions, preferred activities, and dietary preferences. After completing the questionnaire, the platform generates an itinerary and redirects users to a results page that includes a textual description and an integrated map showing the sequence of planned locations.

WonderPlan also provides accommodation recommendations with direct booking options and a cost estimation breakdown across accommodation, transportation, food, and activities. Despite having fewer features than MindTrip, its simplicity makes it an effective tool for users seeking a quick and uncomplicated way to outline trips. While it is likely that WonderPlan also uses Google Maps for map integration, this could not be confirmed. The frontend framework used by WonderPlan remains unidentified.

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Budgeting is a crucial feature in trip planning tools. When implemented effectively, it ensures that travelers can manage their finances while still enjoying meaningful experiences. However, not all platforms execute this feature successfully.

For instance, **LaylaAI** demonstrates significant shortcomings in its budgeting functionality. When prompted with a scenario where two travelers each have a budget of \$300 for a weekend trip to Madrid, the tool fails to generate a budget that aligns with these constraints. Additionally, after providing an initial response, the chat becomes locked, requiring a subscription to proceed further. This limitation restricts accessibility and usability for users seeking free planning options.

i want to go Madrid in a weekend vacation, with my sister. Each one of us have 300 to spend.

Here's the scoop on your weekend adventure in Madrid with your sister! 🎉

Trip Overview: Weekend in Madrid: Sister Adventure

- **Dates:** March 2 - March 4, 2025
- **Travelers:** You and your sister
- **Budget:** €300 each (total €600)

Itinerary Highlights:

- **Accommodation:**
 - [Hostel Acacias](#) - A cozy spot with a decent rating (6.2/10) and a price of €44 for two nights. Perfect for saving those euros for tapas!
- **Activities:**
 - [Madrid: "Emociones" Live Flamenco Performance](#) - Get ready to be mesmerized by some passionate flamenco dancing for just €24.65 each!

Must-See Attractions:

- [Lope de Vega House Museum](#)
- [Cybele Palace](#)
- [Plaza Mayor](#)
- [Puerta del Sol](#)
- [Almudena Cathedral](#)

And a few more to keep you busy!
So, what do you think? Ready to book this fabulous sister getaway, or do you want to tweak something? 🐬 🦄

Similarly, other trip planning tools, such as **Wonderplan** and **Mindtrip**, also exhibit limitations. Both platforms lack customization and do not fully accommodate user preferences. While they provide general travel suggestions, they fail to tailor the experience according to specific user needs, reducing their effectiveness in personalized trip planning.

Wonderplan

What is Your Budget?

The budget is exclusively allocated for activities and dining purposes.



Low
0 - 1000 USD



Medium
1000 - 2500 USD



High
2500+ USD

Mindtrip

Budget×

Select your budget range

☒ Any budget

☐ \$ On a budget

☐ \$\$ Sensibly priced

☐ \$\$\$ Upscale

☐ \$\$\$\$ Luxury

Update

These findings highlight a gap in current trip planning tools, particularly in terms of budget accuracy, customization, and user-centric adaptability.

State of Art

After conducting research into the products and applications currently available in the market that are similar to *Voyage*, we elaborated the following overview of various services and features relevant according to our vision.

Some of these services are:

- [Mindtrip](#) is an AI-driven travel platform that generates personalized, multi-day itineraries via a chat-based interface resembling ChatGPT. Users (both guests and registered) can specify dates, party size, budget range, and “zone” (city, neighborhood, or radius) to receive real-time, location-aware recommendations for attractions, accommodations, transport, and dining. The system integrates Google Maps for interactive maps and “Favorites,” supports point-and-click insertion of suggested places into the itinerary, and allows iterative refinement through follow-up prompts. Mindtrip’s data pipeline explicitly factors geographic context into each suggestion, ensuring relevance to the user’s specified zone.
- [LaylaAI](#) provides a conversational chatbot interface that elicits trip parameters (dates, destinations, interests) and returns a fully fleshed-out itinerary with recommended attractions, lodging, routes, and even multimedia links (videos, images, in-app reviews). Users may refine the plan via subsequent dialogue. Beyond itinerary generation, LaylaAI embeds booking integrations and destination advice within the chat flow, offering a seamless, all-in-one travel assistant experience.
- [WonderPlan](#) offers a streamlined, questionnaire-driven planner without a chatbot. After specifying destination, travel dates, duration, budget tier (Low/Medium/High), companions, activities, and dietary needs, users receive a text-and-map itinerary alongside accommodation suggestions with direct booking links and a cost-breakdown across lodging, transport, food, and activities. While less feature-rich than Mindtrip or LaylaAI, its simplicity and speed address users seeking a rapid overview.

This overview is not exhaustive but highlights the core capabilities currently deployed in AI-powered itinerary planning tools. From these platforms, we identify four essential feature categories for the Voyage Project:

- **Budgeting**
 - (*LaylaAI*) Offers tiered budget ranges and simple cost summaries
 - (*WonderPlan*) Includes a high-level budget selector and breakdown
 - (*MindTrip*) presents cost estimates alongside each suggested activity
- **Trip Planning**
 - (*WonderPlan*) Delivers a structured day-by-day schedule with direct booking links
 - (*MindTrip*) Supports iterative, chat-driven itinerary refinement
- **Zone Setting**
 - (*MindTrip*) Lets you bound search to a specific zone (radius, neighborhood, or city)
- **Group Planning**
 - (*MindTrip*) enables real-time group chat around a shared itinerary.