Triip - Product Requirement Document (PRD)

AI-Powered Travel Copilot for Gen Z

Document Information

Field	Value
Product Name	Triip [AI-Powered Travel Copilot for Gen Z]
Document Owner	Arnab Das
Stakeholders	Arnab Das [Engineering Lead], Arnab Das [Design Lead], Arnab Das [Data Science Lead]
Last Updated	September 25, 2025
Status	Final
Version	2.0
Document Type	New Product

Executive Summary

- **Problem:** Gen Z travelers are overwhelmed by the vast amount of online travel information, making it difficult to create personalized, budget-friendly, and unique itineraries.
- **Solution:** Triip is a generative AI-powered "Travel Copilot" that quickly creates customized 3-day itineraries based on user preferences for budget, interests, and sustainability, leveraging a fine-tuned model for domain-specific accuracy.
- **Impact:** To become the go-to travel planning tool for the Gen Z market by increasing user engagement, satisfaction, and retention through a delightful, efficient, and trustworthy planning experience.
- **Investment:** Initial development will focus on an MVP (Core Itinerary Planning) over a 3-month period (Q1 2026).

Problem Statement

Current State Analysis:

The current travel planning ecosystem for Gen Z is fragmented and inefficient. An estimated 72% of this demographic report feeling overwhelmed by information. They rely on a combination of generic travel aggregators (Expedia), manual research across numerous blogs and social media, and general-purpose AI tools (ChatGPT) that lack specialization and reliability for travel planning.

Key Pain Points:

- **Analysis Paralysis:** Users spend excessive time sifting through generic content, which stifles the excitement of planning a trip.
- **Lack of Genuine Personalization:** Existing tools fail to cater to Gen Z values like sustainability, unique local experiences, and strict budget constraints.
- **High Friction & Inefficiency:** The process of manually piecing together an itinerary from scattered sources is time-consuming and often results in a sub-optimal plan.
- **Trust Deficit in AI:** General AI tools are prone to hallucinations and cannot be fully trusted for critical travel details like opening hours, locations, or safety.

Cost of Inaction:

If this problem remains unsolved, competitors will continue to provide a generic, uninspired travel planning experience. The significant and growing Gen Z travel market will remain underserved, and a major opportunity to build a loyal user base through a tailored, delightful product will be missed.

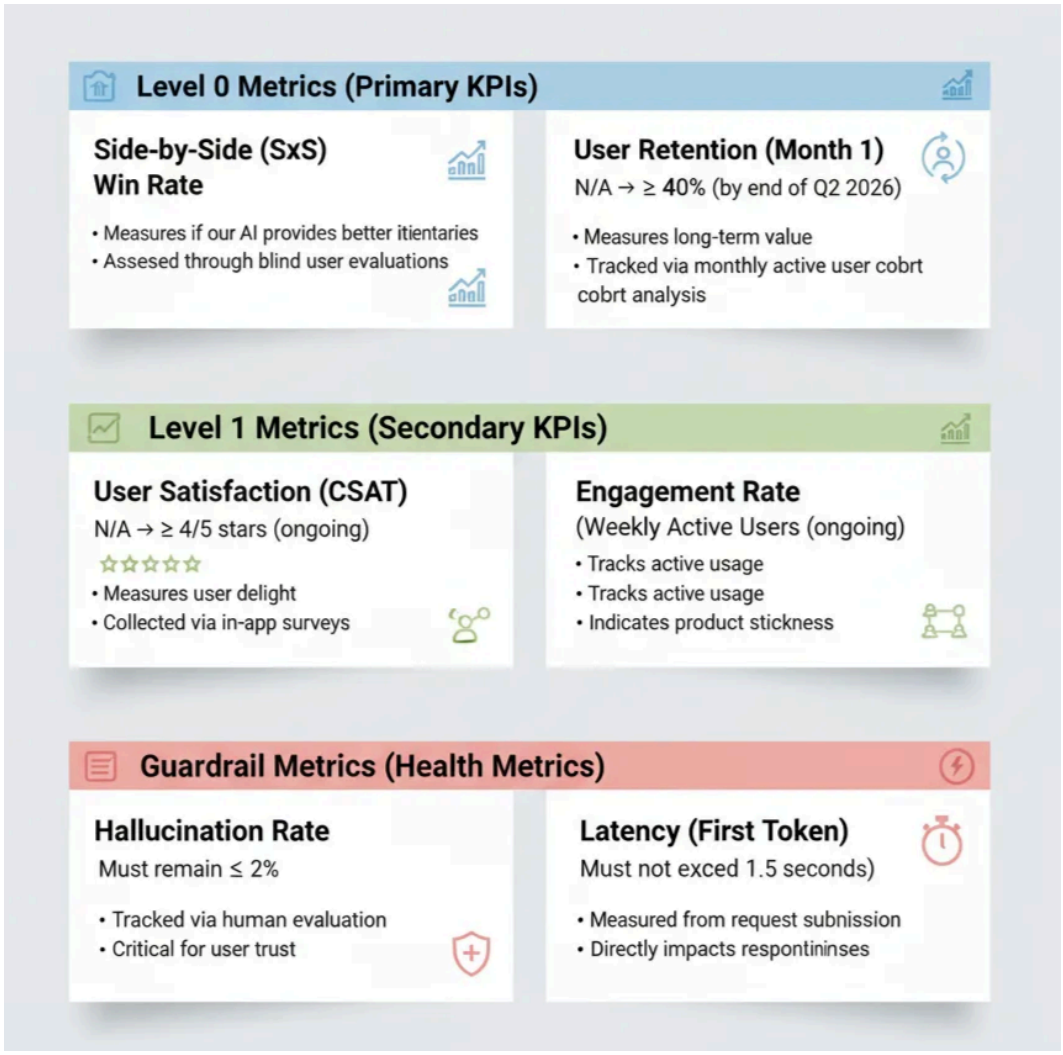
Goals and Success Metrics

Primary Objective (North Star):

To deliver a delightful, AI-powered travel planning experience that is personalized, affordable, fast, and responsible, becoming the go-to tool for Gen Z travelers.

Success Metrics:

1. **Level 0 Metrics (Primary KPIs)**
    - **Side-by-Side (SxS) Win Rate:** N/A → **≥ 70%** (by end of Q2 2026)
        - Measures if our AI provides better itineraries than baseline alternatives
        - Assessed through blind user evaluations comparing our output against competitors
    - **User Retention (Month 1):** N/A → **≥ 40%** (by end of Q2 2026)
        - Measures long-term value and product stickiness
        - Tracked via monthly active user cohort analysis
2. **Level 1 Metrics (Secondary KPIs)**
    - **User Satisfaction (CSAT):** N/A → **≥ 4/5 stars** (ongoing)
        - Measures user delight with the service
        - Collected via in-app surveys after trip planning
    - **Engagement Rate (Weekly Active Users):** N/A → **≥ 60%** of monthly users (ongoing)
        - Tracks active usage of the platform
        - Indicates product stickiness and regular engagement
3. **Guardrail Metrics (Health Metrics)**
    - **Hallucination Rate:** Must remain **≤ 2%**
        - Tracked via human evaluation of random samples
        - Critical for maintaining user trust
    - **Latency (First Token):** Must not exceed **1.5 seconds**
        - Measured from request submission to first response
        - Directly impacts user perception of responsiveness



Target Audience

Primary Users: Gen Z Travelers (Ages 18-28)

- **Size:** A rapidly growing segment of the global travel market.
- **Characteristics:** Digitally native, budget-conscious, values authenticity, sustainability, and unique experiences over traditional tourism. Highly influenced by social media.
- **Current Behavior:** A mix of using Google/Expedia for initial searches, Instagram/TikTok for inspiration, and various blogs for details, leading to a disjointed process.
- **Motivation:** They seek a frictionless, trustworthy tool that understands their unique preferences and helps them discover experiences that align with their values.

User Personas:

1. **The Student Explorer (Anya, 19-22):** Budget-driven, seeks social experiences and hostels. Frustrated by the time it takes to find safe, cheap, and fun options.
2. **The Young Professional (Ben, 23-28):** Time-poor, seeks efficient planning for weekend getaways that are both unique and cost-effective. Frustrated by generic, tourist-trap recommendations.
3. **The Eco-Conscious Traveler (Chloe, 20-26):** Value-driven, seeks sustainable and culturally-rich experiences. Frustrated by the difficulty of verifying eco-friendly claims.

Anya Sharma

The Student Explorer

Age: 19-22 • Mumbai, India

INCOME	TRAVEL FREQUENCY
₹15K-25K/mo	2-3 trips/month

BUDGET PER TRIP	GROUP SIZE
₹1,500-4,000	3-6 friends

🎯 Primary Motivations

- 💰 Budget-conscious travel with maximum value
- 👥 Social experiences and making new friends
- 🏠 Hostels and shared accommodations
- 📱 Instagram-worthy moments for social sharing

⚠️ Pain Points & Frustrations

- ⏰ Time-consuming research to find safe, cheap options
- 🔍 Difficulty verifying accommodation safety
- 💔 FOMO on unique experiences due to budget
- 📂 Overwhelmed by too many travel options

🚀 Desired Features

- 💰 Real-time budget tracking and alerts
- 🎫 Student discounts and special offers
- 👥 Group planning and expense splitting
- 🏠 Hostel finder with safety ratings

📱 Tech Profile

iPhone user, 20+ apps daily, Instagram/TikTok active

Instagram · WhatsApp · Google Maps · Paytm · TikTok

🎢 Primary Journey Focus

Discovery (Budget Filters) → Generation → Refinement → Finalization (Social Share) → Post-Trip

> *"I want to explore the world but my budget is tight. I need help finding places that are safe, fun, and won't break the bank. Plus, I want experiences I can share with my friends!"*

Ben Kapoor

The Young Professional

Age: 23-28 • Bangalore, India

INCOME	TRAVEL FREQUENCY
₹50K-1L/mo	1-2 trips/month

BUDGET PER TRIP	TRAVEL STYLE
₹8,000-25,000	Solo/Partner

🎯 Primary Motivations

- ⚡ Time-efficient planning for busy schedule
- 🏔️ Unique, off-the-beaten-path experiences
- 🌿 Cost-effective weekend getaways
- 🧘 Stress relief and work-life balance

⚠️ Pain Points & Frustrations

- 🏛️ Generic, tourist-trap recommendations everywhere
- ⏰ Limited time for extensive trip research
- 💰 Hidden costs and surprise expenses
- 📱 Information scattered across multiple apps

🚀 Desired Features

- ⚡ Instant itinerary generation in seconds
- 🏞️ Curated off-beaten-path recommendations
- 📱 Mobile-first design for on-the-go planning
- 💳 Transparent pricing and cost breakdown

📱 Tech Profile

Android user, productivity-focused, early adopter

Google Maps · Uber · GPay · LinkedIn · Notion

🎢 Primary Journey Focus

Discovery → Generation (Speed) → Refinement (Uniqueness) → Finalization → Post-Trip

> *"My weekends are precious. I need travel planning that's fast, efficient, and gives me unique experiences - not the same tourist spots everyone else recommends."*

Chloe Patel

The Eco-Conscious Traveler

Age: 20-26 • Delhi, India

INCOME	TRAVEL FREQUENCY
₹35K-70K/mo	1 trip/month

BUDGET PER TRIP	TRAVEL STYLE
₹5,000-15,000	Solo/Small groups

🎯 Primary Motivations

- 🌍 Value-driven, sustainable travel choices
- 🏛️ Culturally-rich and authentic experiences
- ♻️ Supporting local communities and businesses
- 🌿 Minimizing environmental footprint

⚠️ Pain Points & Frustrations

- 🔍 Difficulty verifying eco-friendly claims
- 💚 Greenwashing by tourism companies
- 📊 Lack of sustainability ratings for activities
- 💸 Premium pricing for sustainable options

🚀 Desired Features

- 🌱 Verified eco-ratings and certifications
- 🏛️ Cultural impact and community guides
- 🔍 Sustainability verification system
- 🌍 Carbon footprint calculator for trips

📱 Tech Profile

iPhone user, research-oriented, values authenticity

Instagram · Google · Medium · Reddit · Pinterest

🎢 Primary Journey Focus

Discovery → Generation → Refinement (Sustainability) → Finalization → (In-Trip Re…)

> *"I want my travels to have a positive impact. Show me experiences that are genuinely sustainable and help me support local communities - not just greenwashed marketing."*

🔄 Persona Comparison Matrix

Aspect	🎓 Student Explorer	💼 Young Professional	🌱 Eco-Conscious
Primary Driver	💰 Budget Optimization	⏰ Time Efficiency	🌍 Value Alignment
Key Frustration	Time-consuming research for safe, cheap options	Generic tourist-trap recommendations	Difficulty verifying eco-friendly claims
Decision Speed	⏳ Slow (research-heavy)	⚡ Very Fast (time-poor)	🔍 Moderate (verification-focused)
Social Aspect	👥 High (group travel, sharing)	📱 Medium (professional networking)	🤝 High (community impact)
Tech Expectation	📱 Social integration, budget tools	⚡ Speed, efficiency, mobile-first	🔍 Transparency, verification systems
Journey Focus	Discovery + Finalization	Generation + Refinement	Refinement + Post-Trip

Open this HTML file for better immersed experience:

triip_detailed_user_personas.html

Competitive Analysis

Competitive Landscape Overview

The travel planning market is crowded, but no single player effectively addresses the unique needs of the Gen Z demographic. The current landscape is comprised of three main categories of competitors, each with significant drawbacks:

- **Traditional Aggregators (e.g., Make My Trip, Google Travel, Agoda):** These platforms are fast and offer booking capabilities but provide generic, one-size-fits-all itineraries. They lack deep personalization and fail to cater to Gen Z values like sustainability and unique local experiences. Their recommendations are often influenced by partnerships rather than user needs.
- **Manual Research (e.g., Travel Blogs, Social Media):** While users can find highly personalized and authentic content through blogs and platforms like TikTok, this process is extremely time-consuming and inefficient. It requires sifting through vast amounts of scattered information, and there is no automation, leading to the "analysis paralysis" we aim to solve.
- **General-Purpose AI (e.g., ChatGPT, Perplexity):** These tools can generate itineraries quickly but suffer from a significant trust deficit. They are prone to hallucinations (fabricating details), lack real-time information, and do not have the domain-specific guardrails necessary for providing reliable and safe travel advice.

The 2x2 Competitive Matrix

To visualize Triip's unique position in the market, we can map competitors on two critical axes for the Gen Z user: **Speed & Automation** and **Personalization & Trust**.

Metrics	Low Speed & Automation (Manual Effort)	High Speed & Automation (Instant Results)
High Personalization & Trust	Quadrant 1: Niche & Manual 📝 Travel Blogs Highly personalized but requires immense effort.	Quadrant 2: The Sweet Spot ✈️ Triip Instant, deeply personalized, and trustworthy itineraries.
Low Personalization & Trust	Quadrant 3: (Empty Market) Slow and generic; no viable players exist here.	Quadrant 4: Fast & Generic 🌐 Google Travel / Expedia 🤖 Generic AI (ChatGPT) Quick results that lack personalization and reliability.

Conclusion: Triip's Strategic Advantage

As the matrix clearly demonstrates, Triip is uniquely positioned in the **"Sweet Spot" (Quadrant 2)**. It is the only solution that combines the speed and convenience of AI automation with the deep personalization and trustworthiness that Gen Z travelers demand. By leveraging a fine-tuned model, Triip avoids the generic nature of aggregators and the unreliability of general-purpose AI, creating a significant competitive advantage.

Solution Overview & Detailed Requirements

Feature 1: AI-Powered Itinerary Generation (P0)

1. **Objective:** To provide users with a personalized, 3-day itinerary based on their core preferences.
2. **User Story:** "As a **Student Explorer**, I want to **input my destination, budget, and interests like 'nightlife' and 'street food'** so that **I can get a complete, ready-to-use plan that fits my vibe and wallet**."
3. **Functional Requirements:**
    - The system must accept user inputs for: Destination, Dates, Budget (e.g., $, $$, $$$), and Interests (tags).
    - The system will call the fine-tuned LLM to generate a structured 3-day itinerary.
    - The output will include suggestions for activities, dining, and lodging for each day.
4. **Acceptance Criteria:**

    Given a user enters "Paris, $50/day, Art & Cafes", **When** they submit the query, **Then** the system displays a 3-day itinerary with budget-friendly museum options, affordable cafes, and hostel recommendations.

Feature 2: Budget Optimization (P0)

1. **Objective:** To ensure all suggestions within the itinerary align with the user's specified budget.
2. **User Story:** "As a **Young Professional**, I want to **see a clear cost breakdown for my trip** so that **I can make sure I'm staying within my weekend budget**."
3. **Functional Requirements:**
    - The system must provide an estimated total daily cost.
    - Each suggested item (activity, restaurant) must be tagged with a price estimate (e.g., $, $$, $$$).
4. **Acceptance Criteria:**

    Given an itinerary is generated for a "$100/day" budget, **When** the user views the plan, **Then** the sum of estimated costs for all daily activities should not significantly exceed $100.

Feature 3: Eco-Friendly Filter (P0)

1. **Objective:** To allow users to prioritize sustainable and responsible travel options.
2. **User Story:** "As an **Eco-Conscious Traveler**, I want to **filter for sustainable hotels and locally-owned restaurants** so that **I can travel in a way that aligns with my values**."
3. **Functional Requirements:**
    - The user interface must include a toggle/filter for "Eco-Friendly."
    - When enabled, the AI's recommendations should prioritize businesses with recognized green certifications or a strong focus on sustainability.
4. **Acceptance Criteria:**

    Given a user has the "Eco-Friendly" filter on, **When** an itinerary is generated, **Then** the lodging options should include hotels with known eco-labels or descriptions highlighting their sustainable practices.

Feature 4: Group Travel Mode (P1)

1. **Objective:** To enable collaborative trip planning for multiple users.
2. **User Story:** "As a **Student Explorer** planning a trip with friends, I want to **share an itinerary and have them vote on activities** so that **we can easily decide on a plan together**."

3. **Functional Requirements:**
    - Users must be able to invite others to view and edit an itinerary via a unique link.
    - Collaborators must be able to "upvote" or "downvote" specific suggestions.
4. **Acceptance Criteria:**

    Given a user shares an itinerary with a friend, **When** the friend upvotes an activity, **Then** the activity's vote count updates in real-time for all collaborators.

User Experience & Design

User Journey Map:

Refer the below html file for proper experience:

triip_journey_personas_analysis.html

1. **Discovery & Onboarding:** User finds the app and inputs their initial trip preferences. User feels *curious*.
2. **Generation:** User receives their first personalized itinerary within seconds. User feels *impressed*.
3. **Refinement:** User explores the plan, swaps an activity, and checks the budget. User feels *in control*.
4. **Finalization:** User saves the final plan and shares it with a friend. User feels *excited*.
5. **Post-Trip:** User receives a prompt to rate the recommendations. User feels *helpful*.

User Flow

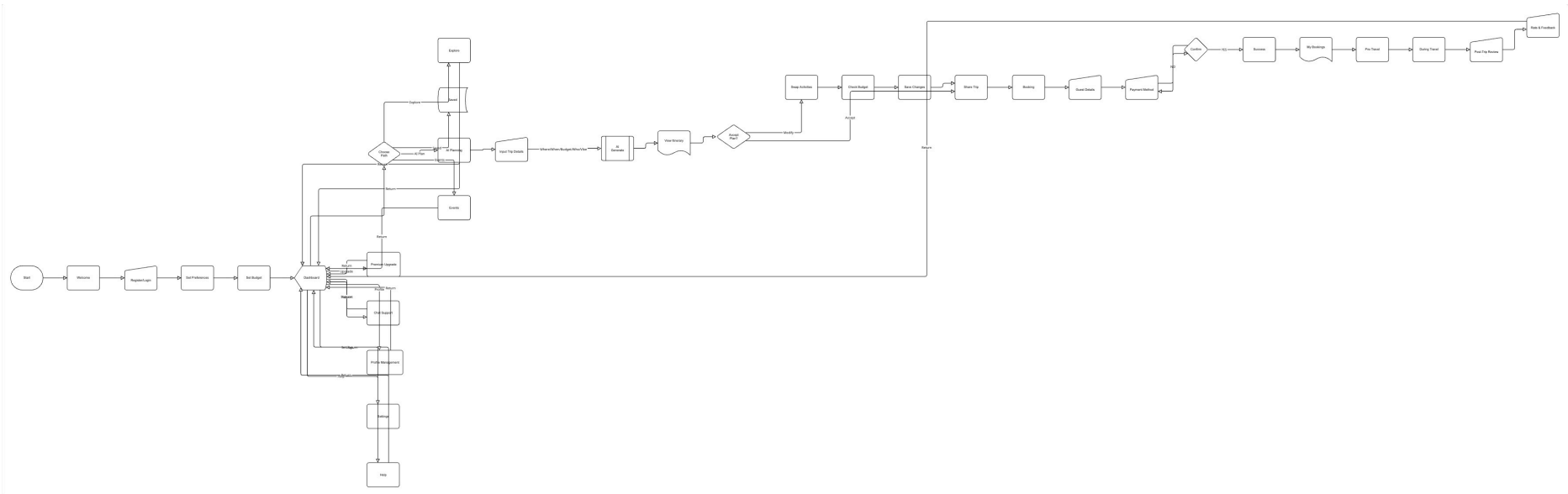
```
flowchart LR
    Start --> Welcome --> Auth[Register/Login]
    Auth --> Onboard[Set Preferences & Budget]
    Onboard --> Dashboard

    Dashboard --> AIPlan[AI Trip Planning]
    Dashboard --> Explore[Browse Destinations]
    Dashboard --> Events[Browse Events]
    Dashboard --> Saved[Saved Trips]

    AIPlan --> Input[Input Trip Details]
    Input --> Generate[AI Generate]
    Generate --> Review[Review Itinerary]
    Review --> Customize[Customize if needed]
    Customize --> Book[Book Trip]

    Explore --> Select1[Select Destination] --> Book
    Events --> Select2[Select Event] --> Book
    Saved --> Select3[Choose Saved Trip] --> Book

    Book --> Payment[Complete Payment]
    Payment --> Success[Booking Confirmed]
    Success --> Travel[Travel Experience]
    Travel --> Feedback[Rate & Review]
    Feedback --> Dashboard
```



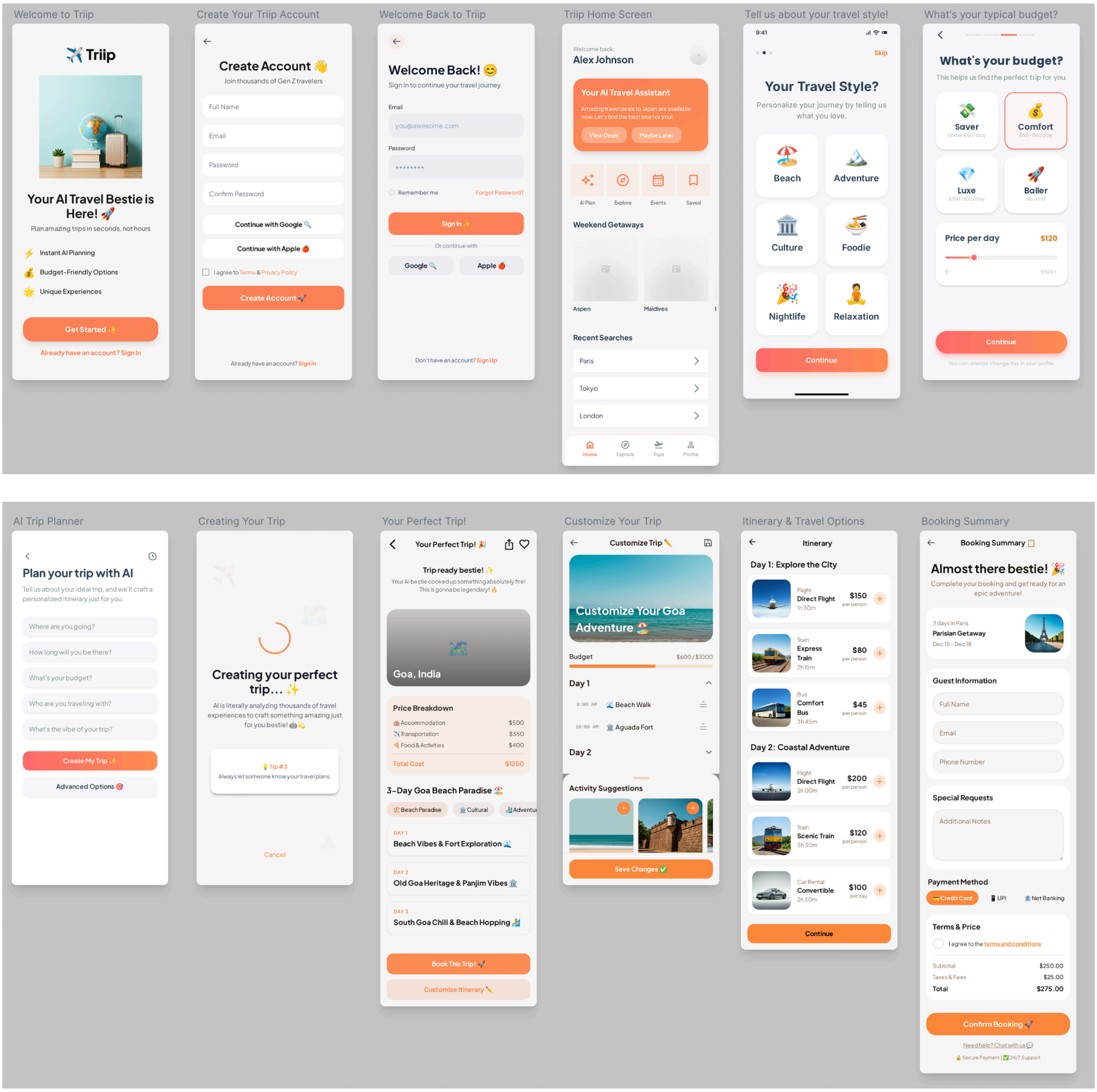
Design Principles:

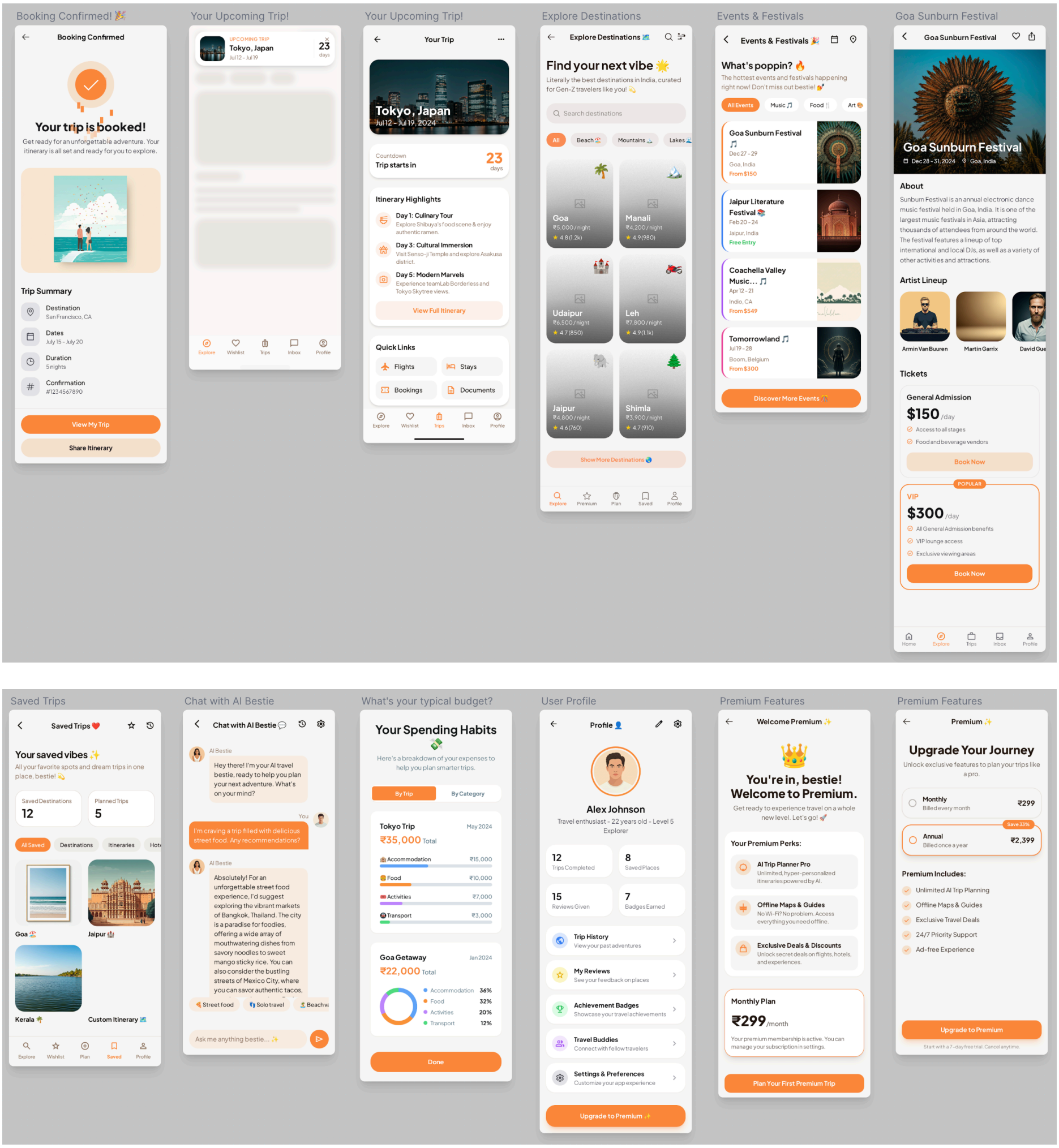
- **Gen Z-First Aesthetic:** Vibrant, modern, and mobile-first UI that feels intuitive and engaging.
- **Clarity & Simplicity:** Avoid clutter. Present information in a clean, scannable format.
- **Trust & Transparency:** Clearly label AI-generated content and explain *why* suggestions are made.

Designs & Prototypes:

1. **Low-Fidelity Wireframes:**

- Google Stitch Link: https://stitch.withgoogle.com/projects/12481370388371678009 [Open in Desktop mode to get proper view]

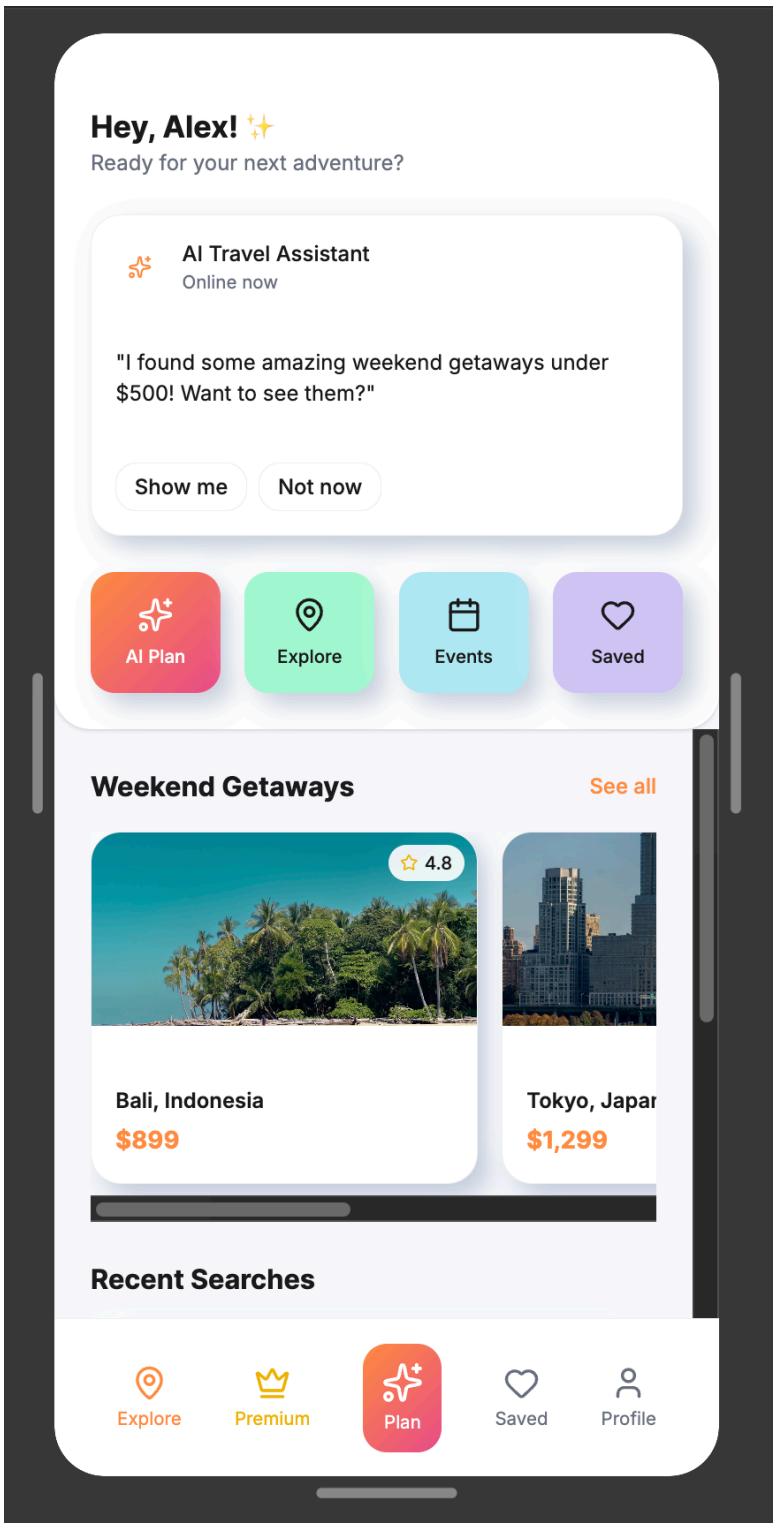




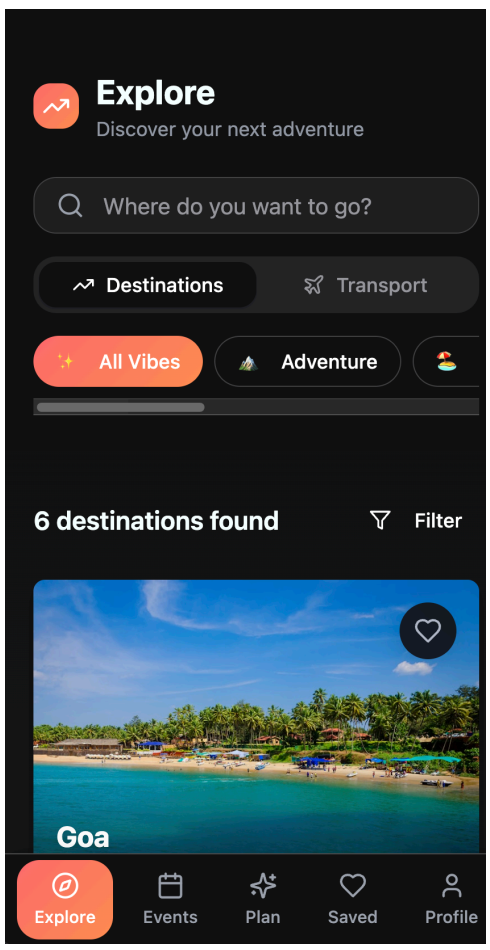
2. **High-Fidelity Clickable Prototype:**

- Clickable Prototype: Open in Mobile for better experience.
  - Link: https://crow-crisp-20558981.figma.site/

https://crow-crisp-20558981.figma.site/



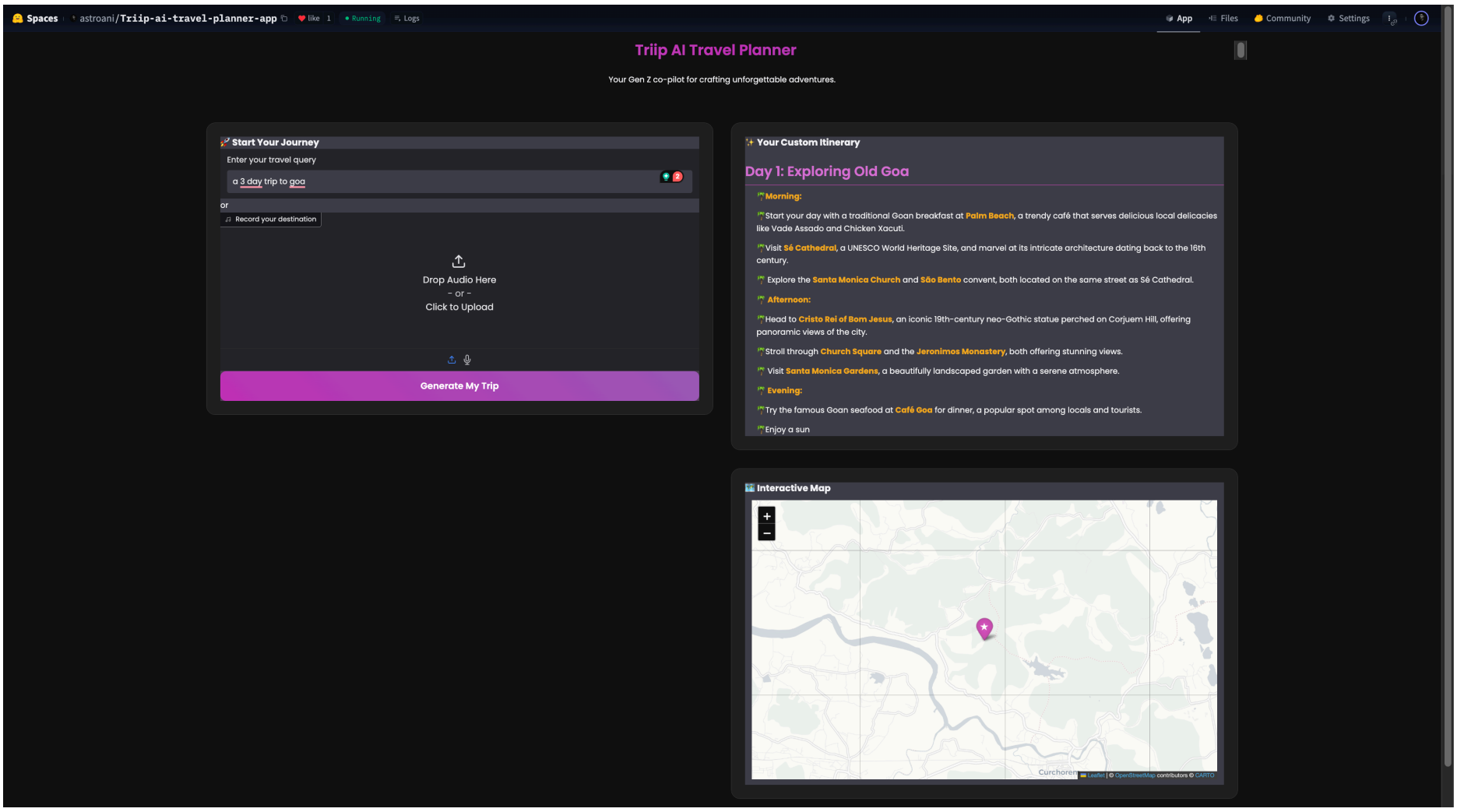
- Working Prototype:
  - Base 44 Model: https://triip-92d739e2.base44.app/



- Model Execution on Hugging Face
  Built Locally using Hugging Face: Custom Dataset, Fine Tuned locally, Working Model hosted on Hugging Face.
  - Application Model:

> huggingface.co
> https://huggingface.co/spaces/astroani/Triip-ai-travel-planner-app

  - HF Profile: https://huggingface.co/astroani



Technical Requirements

Architecture Overview:

- A mobile-first client application (React Native or native) that communicates with a backend service.
- The backend will manage user data and orchestrate calls to the fine-tuned generative AI model endpoint.

Backend Requirements:

- Must support user authentication and data storage (user profiles, saved itineraries).
- Requires robust API integrations with the fine-tuned AI model.

Third-Party Dependencies:

- Cloud hosting provider (e.g., GCP, AWS).
- Generative AI model hosting and API (e.g., Vertex AI).

Performance Requirements:

- **API Response Time:** P95 latency for itinerary generation must be under 1.5 seconds.
- **Scalability:** The architecture must be able to handle a growing user base with minimal performance degradation.

Implementation Plan & Roadmap

Phase 1: MVP Launch (Q1 2026)

- **Scope:** Core Itinerary Generation, Budget Optimization, Eco-Friendly Filter.
- **Goal:** Validate the core value proposition and gather initial user feedback.

Phase 2: Booking Integration & Social Features (Q2 2026)

- **Scope:** Integrate with booking partners (flights, hotels). Introduce "Save, Remix & Share" features.
- **Goal:** Enhance the product's utility and begin exploring revenue streams.

Phase 3: Collaborative & Advanced Features (Q3 2026)

- **Scope:** Launch Group Travel Mode and gamification elements.
- **Goal:** Drive engagement and network effects.

Go-to-Market Strategy

1. **Launch Strategy:** Phased rollout, starting with a beta launch targeted at university students and travel-focused micro-influencers on TikTok and Instagram.
2. **Communication Plan:**
   - **External:** A targeted social media campaign highlighting Triip's unique value proposition for Gen Z.
   - **Internal:** Regular project updates to all stakeholders.
3. **Launch Criteria:**
   - ☐ All P0 features are implemented and pass acceptance criteria.
   - ☐ Latency and Hallucination Rate are within their defined guardrail metrics.
   - ☐ Analytics and user feedback mechanisms are in place.

Risks and Mitigation

Risk	Impact	Probability	Mitigation Strategy
Model Hallucination	High	Medium	Implement strict post-processing validation. Use the thumbs-up/down feedback loop to continuously fine-tune and reduce inaccuracies.
Poor Data Quality	High	Medium	Develop a robust data curation pipeline with spam removal and safety filters. Diversify data sources to mitigate bias.
Low User Adoption	High	Low	Conduct extensive user research and usability testing with the target demographic throughout the development process. Launch with a strong influencer marketing campaign.

Appendices

- **Appendix A: Competitive Analysis[Placeholder for detailed competitive analysis, including the 2×2 matrix graphic.]**
- **Appendix B: User Research[Placeholder for summaries of any user interviews, surveys, or usability testing.]**

Approval & Change Log

Approval Signatures:

Role	Name	Signature	Date
Product Manager	Arnab Das		Sep 19, 2025
Engineering Lead	Arnab Das		Sep 17, 2025
Design Lead	Arnab Das		Sep 20, 2025

Change Log:

Version	Date	Changes	Author
1.0	Sep 25, 2025	Initial Draft	Arnab Das
2.0	Sep 25, 2025	Restructured to align with industry template; added detailed requirements and new sections.	Arnab Das