

FINAL MODULES & SUBMODULES

1. Trips & Budget Module

- Budget Input Interface
- Dynamic Budget Engine
- Manual Trip Planner
- Generated Plan
- Trip History & Saved Plans

2. Recommendation & Discovery Module

- Restaurant & Food Recommendations
- Hotel & Accommodation Recommendations
- Attractions & Hidden Gems
- Deals & Sponsored Ads
- Place Detail Pages

3. Maps & Navigation Module

- Location Search & Filters
- Route Mapping & Directions
- Distance & Travel Cost Calculation
- Nearby Recommendations
- Location Details Overlay

4. Reviews & UGC Module

- Review Feed & Display.
- Filters & Sorting
- Create Review
- Replies & Comment Threads
- Reactions & Interactions
- Gamification & Rewards
- Review Management
- Moderation & Authenticity

5. Profile Module

- Personal Information & Preferences

- Saved Trips & Budgets
- Review History

Contributor Dashboard
Rewards & Coupons Wallet
App Settings

6. Data Management & Integrations Module

Database Schema Design
API Integrations
Web Scraping
Data Sync & Updates
Media Storage & CDN (Content Delivery Network)
Backup & Recovery Procedures

7. Security & Compliance Module

Authentication & Role-Based Access Control
Data Privacy & Consent Management
API Security
Moderation & Abuse Controls
Vulnerability & Penetration Testing

8. Business & Ads Module

Business Onboarding
Ad & Deal Management
Ad Targeting
Target ads by local UGC trends (e.g., positive reviews).
Owner Replies to Reviews
Business Analytics
Plugin (If they are using their own system I.e POS)

FLOW

1. High-Level Flow (System Overview)

This is like a **bird's-eye view** of how the main modules interact. It shows the **big steps** and **connections between modules**.

High-Level Flow (User Journey)

User Access

→ Tourist or Contributor signs up / logs in (**Security & Compliance**).

Profile Setup

→ Set preferences, budget ranges, currency, interests (**Profile Module**).

Plan a Trip

→ Enter budget/duration → **Trips & Budget Module** generates plan (or manual trip).

Get Recommendations

→ Food, hotels, attractions suggested via **Recommendation & Discovery Module** (uses APIs + UGC).

View Maps & Navigation

→ Suggested places shown on map → distance + cost from current location (**Maps & Navigation Module**).

Read & Add Reviews (UGC)

→ User browses review feed, interacts, and posts their own reviews (**Reviews & UGC Module**).

Business & Ads

→ Businesses push promotions → visible in recommendations or review feeds (**Business & Ads Module**).

Data & Security

→ All data flows through **Data Management & Integrations** and secured with **Security & Compliance**.

In short: User → Profile → Trip Planning → Recommendations → Maps → Reviews → Ads → Back to Profile/Rewards.

2. Low-Level Flow (Detailed Connections)

This digs into **how exactly modules and submodules connect** and what data flows between them.

Step 1: Authentication

User logs in (Security & Compliance).

Profile Module loads preferences + saved data.

Step 2: Trips & Budget

Budget Input Interface → takes user's budget, trip duration, travelers.

Dynamic Budget Engine → calculates distribution (travel, hotel, food).

Generated Plan → pulls recommendations (hotels, food, attractions) from Recommendation Module.

Saved in Profile → Trip History.

Step 3: Recommendations

Recommendation Engine fetches data from:

APIs (Google Maps, Yelp, Foodpanda)

UGC Reviews (from Reviews & UGC)

Deals & Ads (Business & Ads)

Sorted and shown to user → linked to Maps Module for location.

Step 4: Maps & Navigation

User clicks a recommendation → opens Maps overlay.

Maps fetches:

Distance & Travel Cost (Google Distance Matrix API).

Location Reviews (from UGC).

Deals/Ads (from Business Module).

Step 5: Reviews & UGC

User views reviews for that place.

Can filter (Food/Hotels/Places).

Can like, reply, mark helpful, or add a new review.

New review is stored in DB (Data Management) and tied to Profile (Review History + Contributor Dashboard).

Rewards assigned (Gamification).

Step 6: Business & Ads

Business adds promotions (via Business Onboarding).

Ads linked to place IDs in DB.

Ads shown inside Recommendation lists, Maps overlays, or Review Feeds.

Ad targeting uses UGC trends (places with high engagement get priority).

Step 7: Data Management & Security

Database manages all persistent storage (Users, Reviews, Trips, Businesses, Ads).

APIs fetch external data.

Web scraping updates menus/prices.

CDN delivers review media quickly.

Security handles authentication, API safety, consent, and abuse prevention.

Step 8: Profile Integration

Profile acts as a **hub**:

Stores saved trips.

Shows review history + rewards.

Shows notifications (reply alerts, coupon unlocks).

Allows editing preferences (currency, language, budget limits).

Diagram Style Suggestion

For your presentation:

High-Level Flow → draw 8 big boxes (Modules) with arrows between them (User → Trips → Reco → Maps → UGC → Profile → Ads → back).

Low-Level Flow → inside each box, show submodules with smaller arrows (e.g., Trip → pulls from Budget Engine → pushes to Recommendations → connects to Maps).

✓ To sum up:

High-Level Flow = “Which modules connect?” (macro view).

Low-Level Flow = “How submodules pass data between each other?” (micro view).
