

🏗️ **Solution Architecture Template**

****Project Name:** *Flight Finder: Navigating Your Air Travel Options***

****Date:** *27 June 2025***

****Team ID:** *LTVIP2025TMID49881***

****Maximum Marks:** *4 Marks***

1 **Overview**

Flight Finder is a web/mobile platform that aggregates and compares flight data from multiple airlines, helping users quickly find the best travel options with real-time updates and a seamless booking experience.

2 **Key Components**

* **Frontend (User Interface)**

- * Web & mobile app with responsive design
- * Search, filter, and comparison features
- * Real-time notifications and alerts

* **Backend (Business Logic)**

- * Flight data aggregation from airline APIs
- * Pricing engine for transparent cost calculation
- * User authentication & profile management

* **Database Layer**

- * Stores user profiles, search history, bookings
- * Cache for frequently accessed flight data

* **External Integrations**

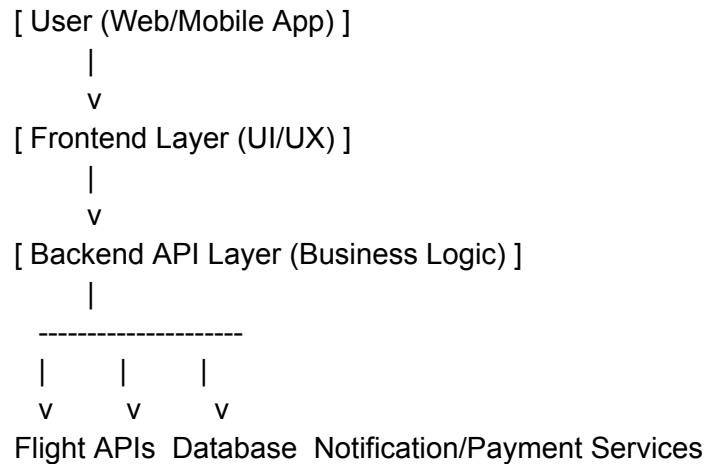
- * Airline APIs for schedules, pricing, availability
- * Payment gateway for secure transactions
- * Notification services (SMS, email, push alerts)

3 **Technology Stack**

- * **Frontend:** React / Flutter (for web & mobile)
- * **Backend:** Node.js / Python Flask
- * **Database:** MySQL / MongoDB
- * **Integration:** REST APIs & Webhooks
- * **Deployment:** Cloud hosting (AWS / Azure)

4 **Solution Architecture Diagram (Conceptual)**

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5 **Benefits of this Architecture**

- * Scalable & modular design
- * Easy integration with new airline APIs
- * Real-time updates ensure better user experience
- * Secure transactions & data protection