Feature: Flight Search

1. Overview

The **Flight Search** feature allows users to discover available flights between an origin and destination for given travel dates. The feature supports one-way, round-trip, and multi-city journeys and integrates with multiple airline and GDS providers to return real-time availability and pricing.

2. Goals & Objectives

- Enable fast and accurate flight discovery

- Support global routes and major airlines

- Provide reliable pricing and availability

- Minimize search latency (<3 seconds for first results)

3. In Scope

- One-way and round-trip searches

- Economy, Premium Economy, Business, First class

- Adult, child, and infant passengers

- Basic fare comparison across airlines

- Currency localization

4. Out of Scope

- Seat selection

- Ancillary services (meals, baggage add-ons)

- Loyalty point redemption

5. User Flow

1. User selects **Flights** tab

2. Enters:

   - Origin (city/airport)

   - Destination (city/airport)

   - Departure date

   - Return date (optional)

   - Passengers & class

3. User clicks **Search**

4. System fetches flight options

5. Results page displays available flights

6. Functional Requirements

ID	Requirement
FR-FS-01	System must validate origin ≠ destination
FR-FS-02	System must support flexible dates (±3 days)
FR-FS-03	Results must show total price incl. taxes
FR-FS-04	Results must display airline, duration, stops

FR-FS-05   Sort by price, duration, departure time

7. Non-Functional Requirements

- **Performance:** Initial results ≤ 3s

- **Availability:** 99.9% uptime

- **Scalability:** Support peak holiday traffic

- **Localization:** Language & currency support

8. Edge Cases

- No flights available

- Airline API timeout

- Price change between search and booking

- Invalid airport codes

9. Success Metrics

- Search → results success rate

- Average response time

- Search abandonment rate