

Project Design Phase-II

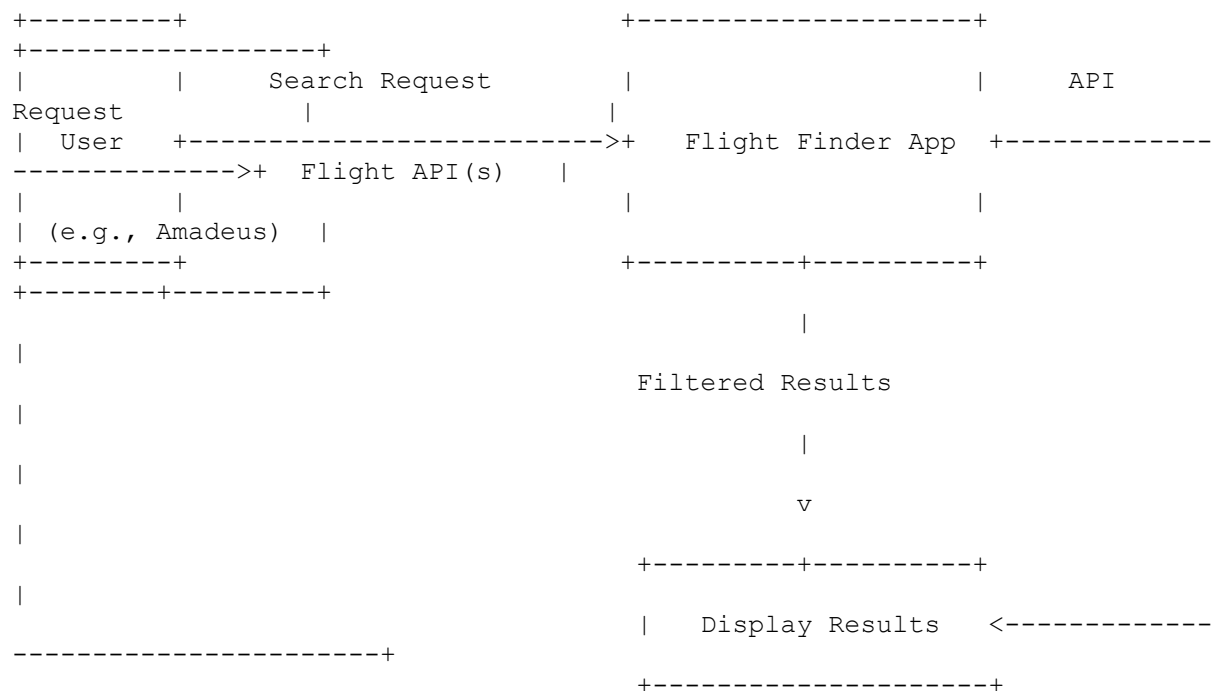
Data Flow Diagram & User Stories

Date	31 January 2025
Team ID	LTVIP2025TMID52738
Project Name	Flight Finder: Navigating Your Air Travel Options
Maximum Marks	4 Marks

Data Flow Diagram (DFD)

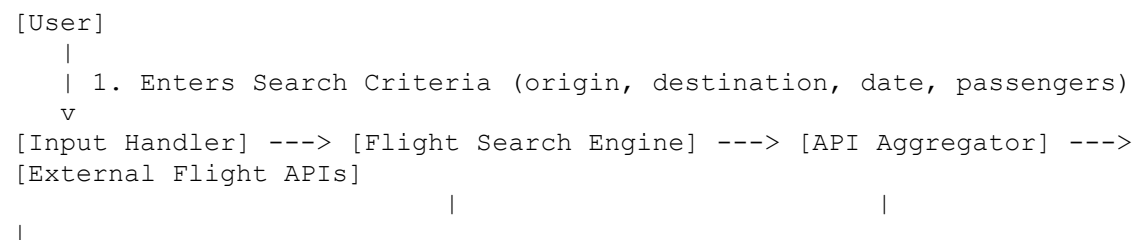
Level 0 – Context-Level DFD

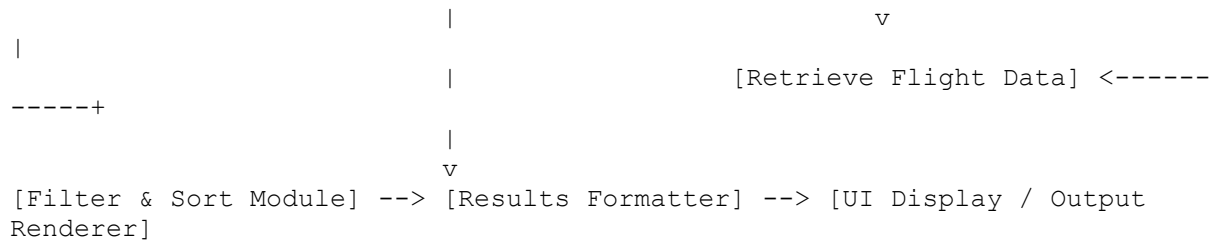
This high-level diagram shows how the user interacts with the system and how data flows between external and internal components.



Level 1 – Detailed DFD

This breaks the application into functional components and shows detailed data flow:





Modules Explained:

- **Input Handler:** Accepts and validates user inputs.
- **Flight Search Engine:** Initiates search and coordinates modules.
- **API Aggregator:** Sends search parameters to multiple flight APIs.
- **Filter & Sort Module:** Applies filters (e.g. price, layover).
- **Results Formatter:** Organizes response data into readable format.
- **UI Display:** Presents final flight listings to the user.

User Stories (Agile Style)

Here are user-centered requirements written in standard Agile format:

Core User Stories

1. **Search Flights**
As a user, I want to search for flights by origin, destination, and date, so that I can find flights that match my travel needs.
2. **Filter Results**
As a traveler, I want to filter flight results by price, airline, layovers, and travel time, so I can quickly find the most suitable flights.
3. **Sort Options**
As a user, I want to sort flights by price, duration, or departure time, so I can evaluate my best options easily.
4. **Flight Details**
As a user, I want to view flight details like baggage allowance and layover durations, so that I can make informed booking decisions.

Feature-Oriented Stories

5. **Mobile-Friendly Interface**
As a mobile user, I want the interface to be responsive and simple, so I can search and browse flights on my phone.
6. **Save Recent Searches**
As a frequent flyer, I want to save my recent search queries, so I don't have to re-enter them every time.

7. **Set Price Alerts**

As a user, I want to receive notifications when flight prices drop for a particular route, so I can book at the best time.

8. **Redirect to Booking Site**

As a user, I want to be redirected to the airline or partner website to complete my booking, so I can finalize my travel plans securely.

Account & Security (Optional Scope)

9. **User Authentication**

As a user, I want to create an account and log in, so I can track my searches and price alerts.

10. **Data Privacy**

As a security-conscious traveler, I want my personal and search data to be handled securely, so my privacy is protected.