Project Design Phase-II
Data Flow Diagram & User Stories

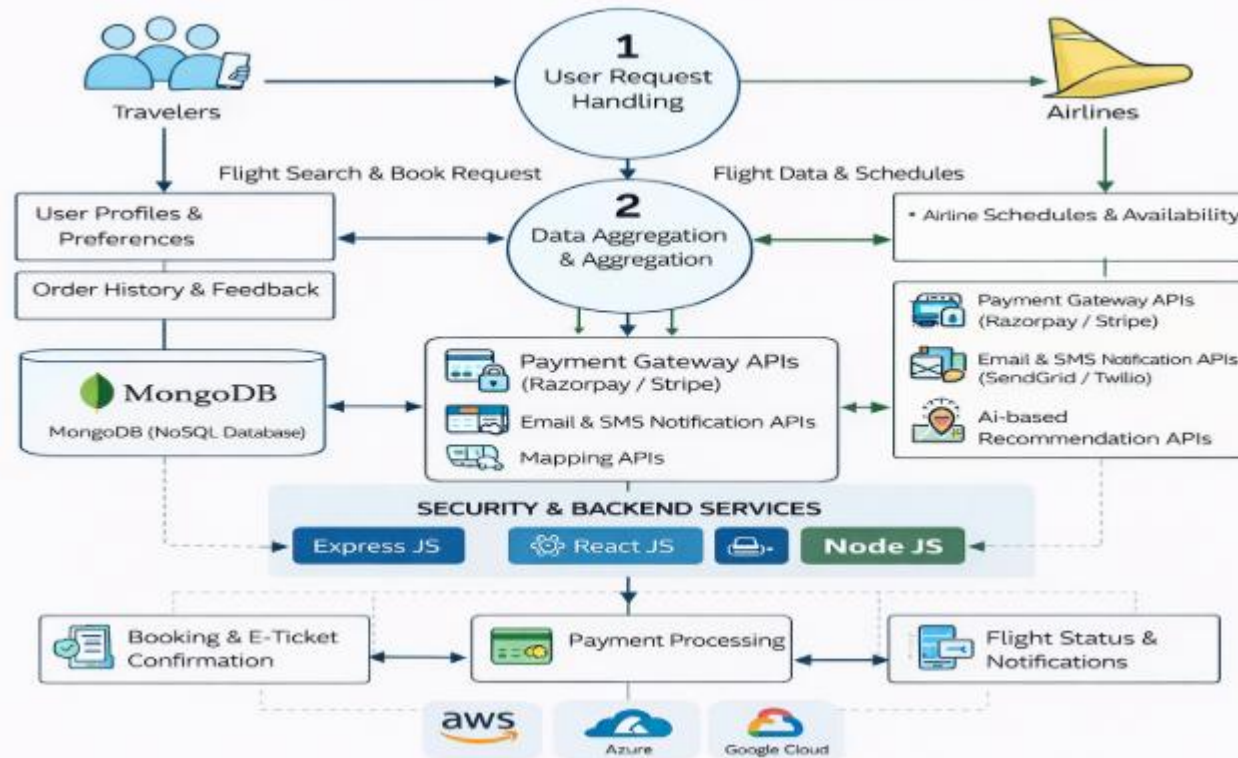|	
Date	31 January 2026
Team ID	LTVIP2026TMIDS60082
Project Name	FlightFinder – Navigating Your Air Travel Options
Maximum Marks	4 Marks

Data Flow Diagrams:

FlightFinder – Navigating Your Air Travel Options connects travelers, airlines, and technology to deliver a fast, convenient, and reliable flight booking experience. The platform gathers data from users, airlines, and integrated services—processes it—and provides real-time flight availability, secure booking management, and instant confirmation updates. Simple, efficient, and user-centric.

○ User interactions are handled through an intuitive web interface for searching flights, comparing prices, selecting seats, and completing bookings.

○ Real-time data from airlines, flight schedules, seat availability, and payment gateways is collected and processed securely.

○ Booking status and flight details are monitored and updated instantly to ensure accurate information.

○ Payment transactions are processed securely through third-party payment gateway integrations.

○ Booking history, user insights, and flight management data are generated for travelers and administrators to improve decision-making and service efficiency.

Example: DFD Level 0 (Industry Standard)

FLIGHTFINDER – NAVIGATING YOUR AIR TRAVEL OPTIONS

Travelers

1
User Request Handling

Airlines

Flight Search & Book Request

Flight Data & Schedules

User Profiles & Preferences

2
Data Aggregation & Aggregation

- Airline Schedules & Availability

Order History & Feedback

Payment Gateway APIs (Razorpay / Stripe)

Email & SMS Notification APIs (SendGrid / Twilio)

MongoDB

MongoDB (NoSQL Database)

Payment Gateway APIs (Razorpay / Stripe)

Email & SMS Notification APIs

Mapping APIs

Ai-based Recommendation APIs

SECURITY & BACKEND SERVICES

Express JS   React JS   Node JS

Booking & E-Ticket Confirmation

Payment Processing

Flight Status & Notifications

aws

Azure

Google Cloud

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through Google login.	I can register & access the dashboard with Google Login	Medium	Sprint-1
	Login	USN-4	As a user, I can log in using email and password.	I can access my account successfully.	High	Sprint-1
		USN-5	As a user, I can reset my password if I forget it.	I receive reset link and can create new password.	High	Sprint-1
	Flight Search	USN-6	As a user, I can search flights by source, destination, and date.	System displays available flights.	High	Sprint-1
		USN-7	As a user, I can filter flights by price and airline.	Filtered results are displayed correctly.	Medium	Sprint-2
	Flight Booking	USN-8	As a user, I can select a flight and enter passenger details.	Passenger details are saved before payment.	High	Sprint-1
		USN-9	As a user, I can make secure online payment.	Payment is processed securely and confirmed.	High	Sprint-1
		USN-10	As a user, I receive booking confirmation and e-ticket.	Confirmation email and ticket are generated.	High	Sprint-1
	Booking Management	USN-11	As a user, I can view my booking history.	Past and upcoming bookings are visible.	Medium	Sprint-2
		USN-12	As a user, I can cancel a booking.	Booking status updates after cancellation.	Medium	Sprint-2
Customer (Web User)	Flight Search	USN-13	As a web user, I can search and compare flights.	Search results are displayed clearly.	High	Sprint-1

	Booking	USN-14	As a web user, I can book a flight online.	Booking is successfully confirmed.	High	Sprint-1
Administrator	Flight Management	USN-15	As an admin, I can add new flights.	Flight is added to system database.	High	Sprint-1
		USN-16	As an admin, I can update flight details.	Updated details are reflected in search results.	High	Sprint-1
		USN-17	As an admin, I can delete flights.	Flight is removed from system.	Medium	Sprint-2
	Booking Management	USN-18	As an admin, I can view all bookings.	All booking details are displayed.	High	Sprint-1
	Reports	USN-19	As an admin, I can generate booking reports.	Report is generated successfully.	Medium	Sprint-2