

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	28-11-2025
name	m.sriram
Project Name	Flight Booking System
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

Functional Requirements – Flight Booking System

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Flight Search & Discovery	Search flights by date, origin, destination, passenger count
		Apply filters such as airline, price, time
		View flight details (fare, duration, stops, timings)
FR-2	Flight Selection & Passenger Details	Select a preferred flight from search results
		Enter passenger details (name, age, ID info)
		Select seats from seat map
FR-3	Booking & Payment Processing	Make secure online payment using card/UPI/wallet
		Generate PNR and e-ticket after successful payment
		Send tickets via email/SMS
FR-4	Booking Management	View all previous bookings (history)
		Download ticket/boarding pass
		Cancel flight booking
		Check refund/booking status
FR-5	Flight Management (Admin)	Add new flights with schedule, route, price
		Update flight timings, price, availability
		Remove/disable flights
FR-6	User Management (Admin)	Manage passenger accounts
		View passenger bookings
		Handle complaints/support requests

FR-7	Airline Data Integration	Fetch real-time flight availability and pricing
		Sync seat availability from airline
		Update flight schedules automatically

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The UI should be simple, clean, and easy for passengers to search & book flights.
NFR-2	Security	End-to-end encryption for payments; role-based access for admin/passenger.
NFR-3	Reliability	Booking, payment, and search should work consistently under all conditions.
NFR-4	Performance	Search results must load within 2 seconds; bookings should be processed instantly.
NFR-5	Availability	The system must maintain at least 99.9% uptime.
NFR-6	Scalability	The system should support high user load during festival/holiday seasons.
NFR-7	Data Accuracy	Flight info, pricing, and availability must always remain up to date.
NFR-8	Compatibility	The system must work properly on all modern browsers and mobile devices.