Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	31 January 2025
Team ID	LTVIP2025TMID53108
Project Name	FlightFinder
Maximum Marks	4 Marks

FlightFinder – Functional Requirements

No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Gmail
FR-2	User Confirmation	Confirmation via Email
FR-3	Flight Search	Search by source, destination, date
		Sort results by relevance, price, travel time
FR-4	Alerts & Recommendations	Set price drop alerts for specific routes
		Receive flight recommendations based on user history
FR-5	Booking Redirection	Click on selected flight to visit external booking site
		Track redirection success or failure
FR-6	User Dashboard	View saved searches, alerts, recent activity
		Monitor Users and Operators
FR-7	Admin Functions	View analytics on searches and performance
		Modify indexing and search configurations
FR-8	Customer Support	Admin/Executive can respond and close tickets

FlightFinder – Non-Functional Requirements

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The interface should be intuitive and responsive across devices (web & mobile), ensuring a seamless user experience for travelers of all skill levels.
NFR-2	Security	Secure authentication (e.g. JWT, OAuth), encrypted data transmission (TLS), and adherence to OWASP standards to protect user data and prevent attacks.
NFR-3	Reliability	The system should deliver consistent results and handle API failures or retries gracefully with fallback caching and error handling mechanisms.
NFR-4	Performance	The platform should support high-speed queries (
NFR-5	Availability	Ensure 99.9% uptime via multi-zone cloud deployment, load balancers, and health monitoring tools like Prometheus or Grafana.
NFR-6	Scalability	Modular microservices and dynamic indexing architecture should support increasing traffic and growing datasets without service degradation.