Project Design Phase Solution Architecture

Date	26 June 2025
Team id	LTVIP2025TMID20321
Project Name	Flight Finder
Maximum Marks	2 Marks

Objective:

To bridge the gap between the user-facing booking experience and backend management by implementing a modular full-stack solution.

Key Components:

Layer	Description
Frontend (React)	User-facing pages, admin dashboards, flight search, booking forms.
Backend (Node.js + Express)	API handling, authentication, CRUD for users, flights, and bookings.
Database (MongoDB)	Stores users, flights, bookings, and approval statuses.
Authentication	Role-based: user, admin, flight operator.
Deployment	Local development with optional cloud deployment (e.g., Heroku, Vercel).

Flow Summary:

- **1.** User registers/logins \rightarrow views flights \rightarrow books \rightarrow booking saved in MongoDB.
- **2.** Admin/operator logs in \rightarrow views dashboards \rightarrow adds or edits flights.
- **3.** Booking and user data are filtered per role and fetched via REST API endpoints.

SB Flights – Full Stack Web Application

