**Project Design Phase**

**Solution Architecture**

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| Date | 26 -05-2025 |
| Team ID | LTVIP2025TMID59024 |
| Project Name | Flightfinder-navigating your air travel options |
| Maximum Marks | 4 Marks |

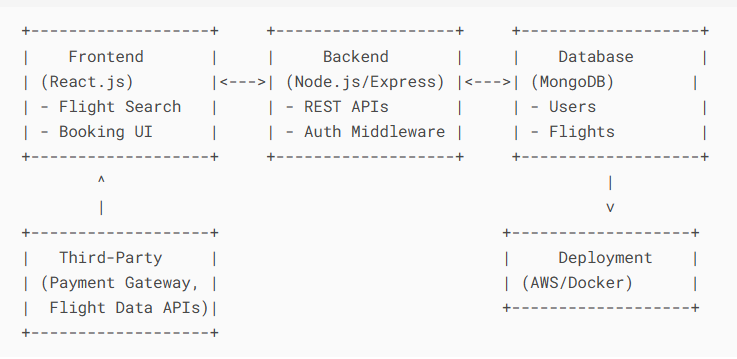
**Solution Architecture:**

The solution architecture for *FlightFinder* ensures a scalable, secure, and user-friendly platform for travelers to explore and book flight options. The system is built on the **MERN stack** with separate modules for **user**, **airline**, and **admin** roles.

The architecture emphasizes:

* Seamless flight search and booking functionality
* Real-time flight status and availability updates
* Secure user, airline, and admin authentication
* Scalable backend APIs with RESTful architecture
* Structured data flow between frontend, backend, and database
* Role-based dashboards with conditional rendering (e.g., user bookings, airline management, admin controls)
* Admin oversight for managing airlines, promotions, and system visibility

**Example - Solution Architecture Diagram:**

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