**Project Design Phase**

**Solution Architecture**

|  |  |
| --- | --- |
| Date | 15 February 2026 |
| Team ID | LTVIP2026TMIDS78982 |
| Project Name | FlightFinder – Navigating Your Air Travel Options |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

Solution architecture bridges the gap between the business problem of complex and scattered flight booking systems and the technology solution provided by FlightFinder. It defines how different components of the system work together to deliver a secure, scalable, and user-friendly flight booking experience.

● **Find the best technical solution** to simplify flight search, comparison, and booking for travelers.

● **Describe the system structure and behavior** including frontend, backend, database, and external integrations for stakeholders.

● **Define key features and development phases** such as user registration, flight search, booking, payment integration, and booking management.

● **Provide technical specifications** that guide development, deployment, and maintenance of the FlightFinder platform.

## Architecture Structure (3-Tier Architecture)

### 1 Presentation Layer (Frontend)

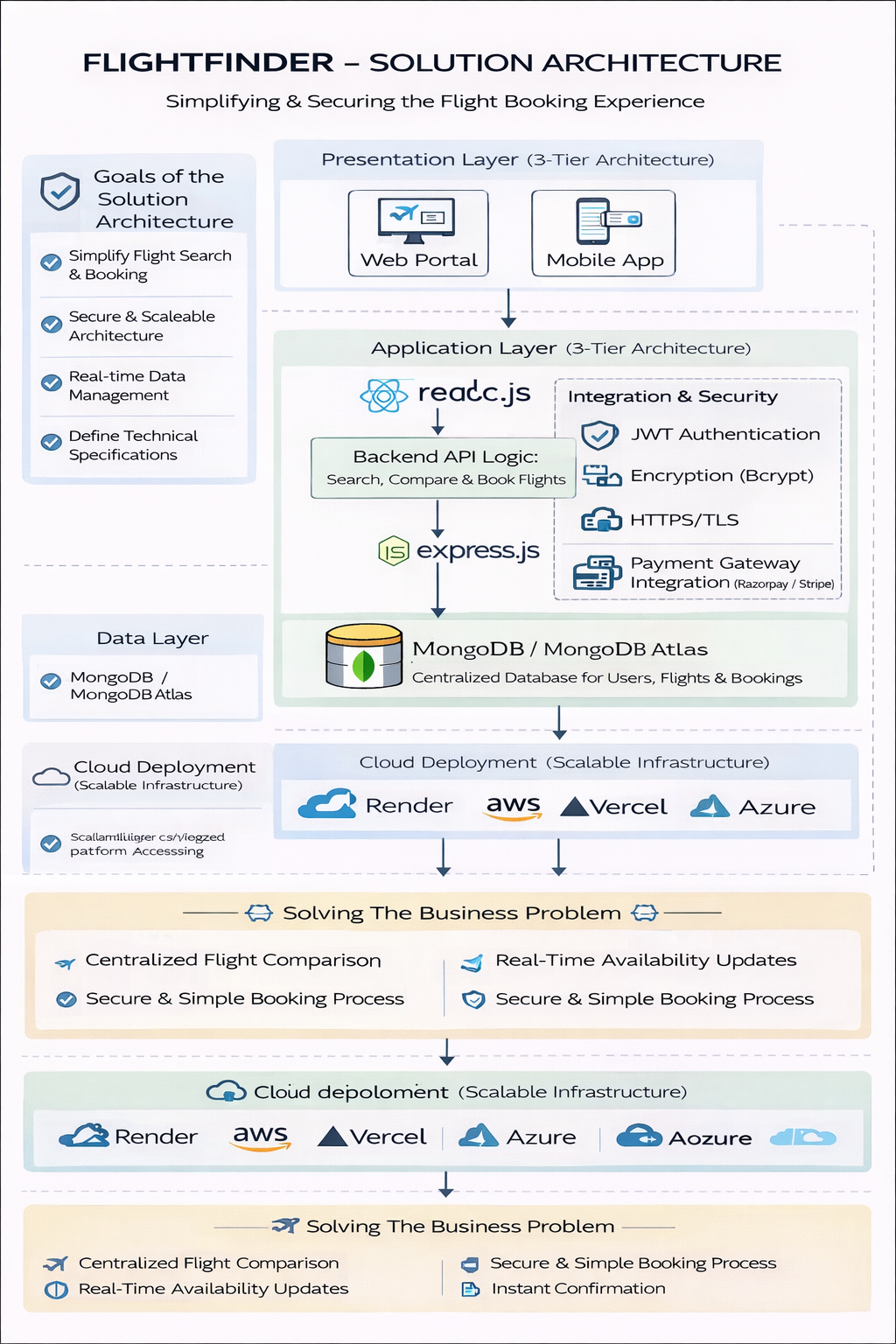
* Built using React.js
* Provides user interface for searching, comparing, and booking flights
* Handles user interaction and input validation

### 2 Application Layer (Backend)

* Built using Node.js and Express.js
* Processes business logic such as flight search, booking, and payment handling
* Communicates with database and external APIs

### 3 Data Layer (Database)

* MongoDB / MongoDB Atlas
* Stores user details, flight data, booking history, and transaction records

****