**Project Design Phase**

**Solution Architecture**

|  |  |
| --- | --- |
| Date | 15 February 2025 |
| Team ID | LTVIP2025TMID54470 |
| Project Name | **DocSpot** |
| Maximum Marks | 4 Marks |

**Description:**

Solution architecture is a complex process that bridges the gap between business problems and technology solutions. Its goals are to:

* Find the best tech solution to solve existing business problems
* Describe the structure, characteristics, behavior, and flow of the system
* Define features, development phases, and solution requirements
* Provide specifications for defining, managing, and delivering the solution

**DocSpot Architecture:**

**Frontend:**

* Built with React.js and Bootstrap
* Uses Axios for API communication
* Implements role-based views and dynamic forms

**Backend:**

* Developed in Node.js using Express.js
* RESTful APIs for patient, doctor, and admin operations
* Authentication using JWT tokens

**Database:**

* MongoDB with Mongoose schemas
* Collections: Users, Appointments, Medical Records

**Integration Flow:**

* Patients and doctors interact with the React frontend
* Axios sends requests to Express backend APIs
* Backend processes data and stores in MongoDB
* Admins access additional controls for platform oversight

**Architecture Diagram:**

(Diagram to be inserted: showing Patient UI → Backend APIs → MongoDB, Doctor UI, Admin Panel)

