**Project Design Phase**

**Solution Architecture**

|  |  |
| --- | --- |
| Date | 29/11/2025 |
| Team ID |  |
| Project Name | DocSpot |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

The solution architecture for Doctor Appointment Booking System ensures a robust, user-friendly, and scalable platform that connects patients with healthcare providers. The architecture focuses on responsive design, secure data management, intelligent scheduling, and real-time notifications to ensure smooth appointment workflows and high user satisfaction.

**Key Features:**

* Seamless appointment booking with real-time availability
* End-to-end appointment lifecycle management
* Scalable user authentication and authorization
* Secure patient data storage with HIPAA compliance
* Reliable real-time notifications and reminders
* Multi-device responsive design (web and mobile)
* Intelligent doctor search and filtering system
* Calendar integration for doctors and patients
* Payment gateway for consultation fees

**Example - Solution Architecture Diagram:**

