Project Design Phase
Proposed Solution Template

Date	20 February 2026
Team ID	LTVIP2026TMIDS56110
Project Name	DocSpot – Online Doctor Appointment Booking System
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No	Parameter	Description
1	**Problem Statement**	Patients face difficulty in booking doctor appointments due to long waiting queues, lack of real-time availability information, manual scheduling, and poor communication between hospitals and patients. Many people waste time visiting hospitals physically just to check doctor availability.
2	**Idea / Solution Description**	DocSpot is a web-based online doctor appointment booking system that allows patients to register, search for doctors based on specialization and availability, book appointments, make online payments, and receive instant confirmation. Doctors can manage their schedules, and administrators can monitor system activities through a centralized dashboard.
3	**Novelty / Uniqueness**	The system provides real-time slot availability, easy appointment rescheduling, role-based dashboards (Patient/Doctor/Admin), secure authentication (JWT), and cloud-based deployment. Future enhancements may include AI-based doctor recommendations and teleconsultation features.
4	**Social Impact / Customer Satisfaction**	DocSpot reduces hospital overcrowding, saves patient time, improves healthcare accessibility, and enhances patient satisfaction through convenience and transparency. It also supports digital healthcare transformation, especially in rural and semi-urban areas.
5	**Business Model (Revenue Model)**	Revenue can be generated through: • Commission per booked appointment • Subscription plans for hospitals/doctors • Premium doctor listing • Advertisement placements • Teleconsultation service fees
6	**Scalability of the Solution**	The system follows a scalable 3-tier MERN architecture. It can handle increasing users and appointments by scaling backend servers and cloud databases (MongoDB Atlas, AWS). The solution can expand to multiple cities, hospitals, and integrate telemedicine services in future.