

**Project Design Phase**  
**Proposed Solution Template**

Date	15 February 2025
Team ID	LTVIP2026TMIDS88461
Project Name	DocSpot — Seamless Appointment Booking for Health
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No	Parameter	Description
1	<b>Problem Statement (Problem to be solved)</b>	Patients face difficulties in finding suitable doctors, checking availability, and booking appointments efficiently. Manual booking processes cause delays, double bookings, and poor communication between patients and healthcare providers.
2	<b>Idea / Solution Description</b>	DocSpot is a web and mobile-based appointment booking platform that enables patients to search for doctors by specialization and location, view real-time availability, and book appointments seamlessly. The system includes doctor approval workflows, automated notifications (Email/SMS/Push), document uploads, and admin monitoring.
3	<b>Novelty / Uniqueness</b>	<ul style="list-style-type: none"> <li>• Real-time slot validation to prevent double booking</li> <li>• Integrated doctor approval workflow</li> <li>• Multi-channel notifications (Email, SMS, Push)</li> <li>• Secure medical document upload &amp; access control</li> <li>• Role-based dashboards (Patient, Doctor, Admin)</li> <li>• Scalable cloud-ready architecture</li> </ul>
4	<b>Social Impact / Customer Satisfaction</b>	<ul style="list-style-type: none"> <li>• Reduces waiting time for patients</li> <li>• Improves healthcare accessibility</li> <li>• Enhances doctor visibility and transparency</li> <li>• Provides secure medical record handling</li> <li>• Improves patient satisfaction through reminders &amp; easy rescheduling</li> </ul>
5	<b>Business Model (Revenue Model)</b>	<ul style="list-style-type: none"> <li>• Commission per appointment booking</li> <li>• Subscription plans for doctors (premium listing)</li> <li>• Featured doctor advertisements</li> <li>• Future integration of paid consultation services</li> <li>• Analytics subscription for hospitals/clinics</li> </ul>
6	<b>Scalability of the Solution</b>	<ul style="list-style-type: none"> <li>• Cloud-based deployment (AWS/GCP/Azure)</li> <li>• Horizontal backend scaling</li> <li>• Redis caching for performance optimization</li> <li>• Queue-based notification processing</li> <li>• Supports 1000+ concurrent users</li> <li>• Microservices-ready architecture</li> </ul>