Final Report

# 1. INTRODUCTION

## 1.1 Project Overview

DocSpot is a web-based application designed to streamline the process of booking doctor appointments. It connects patients with doctors based on specialization, availability, and location, offering a user-friendly interface for both patients and healthcare providers.

## 1.2 Purpose

The main purpose of DocSpot is to eliminate the manual and time-consuming process of booking health consultations. It ensures quick appointment scheduling, reduces waiting times, and improves the overall healthcare experience.

# 2. IDEATION PHASE

## 2.1 Problem Statement

I am a patient trying to book a doctor appointment, but I face delays and manual processes, which makes me feel frustrated.

## 2.2 Empathy Map Canvas

Says: I want quick appointments.  
Thinks: It should be easy.  
Does: Searches multiple sites.  
Feels: Frustrated and tired.

## 2.3 Brainstorming

We considered various ideas like hospital management systems, medicine reminders, and health tracking apps before finalizing a simple and effective doctor appointment platform.

# 3. REQUIREMENT ANALYSIS

## 3.1 Customer Journey map

User visits site → Logs in → Searches doctor → Books appointment → Receives confirmation.

## 3.2 Solution Requirement

Functional: User authentication, Doctor listing, Booking system.  
Non-functional: Secure, Responsive, Fast, Scalable.

## 3.3 Data Flow Diagram

Include a Level 1 DFD showing user requests flowing through the frontend to backend and interacting with the database.

## 3.4 Technology Stack

Frontend: React.js  
Backend: Node.js, Express.js  
Database: MongoDB

# 4. PROJECT DESIGN

## 4.1 Problem Solution Fit

The solution addresses the issue of time-consuming doctor appointment systems by introducing a fast, reliable digital interface.

## 4.2 Proposed Solution

DocSpot includes features like doctor search, booking slots, viewing past appointments, and managing schedules.

## 4.3 Solution Architecture

Client (React) → Server (Express/Node) → Database (MongoDB).

# 5. PROJECT PLANNING & SCHEDULING

## 5.1 Project Planning

Week 1: Requirements & Design  
Week 2-3: Development  
Week 4: Testing & Deployment

# 6. FUNCTIONAL AND PERFORMANCE TESTING

## 6.1 Performance Testing

The application was tested for responsiveness and speed across devices. Lighthouse and Chrome DevTools were used for performance audits.

# 7. RESULTS

## 7.1 Output Screenshots

Login page, Doctor listing, Booking interface, Appointment confirmation screens were captured as proof of implementation.

# 8. ADVANTAGES & DISADVANTAGES

Advantages:  
- Time-saving  
- Easy to use  
- Secure  
  
Disadvantages:  
- Requires internet access  
- Might have initial bugs

# 9. CONCLUSION

DocSpot successfully provides a smooth and efficient method for booking doctor appointments. It enhances the patient experience and supports doctors in managing their schedules effectively.

# 10. FUTURE SCOPE

Future enhancements may include video consultation, in-app prescriptions, AI-based doctor suggestions, and patient feedback integration.

# 11. APPENDIX

Source Code: https://github.com/satyavasavisv/DocSpot-Seamless  
Dataset Link: N/A  
Project Demo Link: [Provide if available]