

System Analysis for a Derma Clinic System

1. Introduction

- **Purpose:** The Dermatology Clinic System (DCS) is designed to manage patient appointments, medical records, doctor schedules, and billing information.
- **Scope:** The system will facilitate the operations of a dermatology clinic, including patient registration, doctor-patient consultations, prescription management, and reporting.
- **Stakeholders:** Dermatologists, clinic staff, administrators, managers and patients.

2. System Overview

- The DCS will be a web-based application with role-based access for doctors, staff, and patients. It will manage medical history, prescriptions, lab results, and appointment scheduling.
- Integration with medical devices or skin analysis systems may be added for advanced features.

3. Functional Requirements

1. User Management

- a. **Doctors:** Can view their schedule, access patient medical history, enter diagnosis and treatment details, prescribe medications, and request lab tests.
- b. **Patients:** Can create accounts, book appointments, view their medical records, and access prescriptions. (To be added)
- c. **Staff:** Can manage patient data, book/cancel appointments, and handle billing.

2. Appointment Scheduling

- a. Patients can book, reschedule, or cancel appointments. (WhatsApp)
- b. Doctors' availability will be managed, and automatic reminders will be sent to patients.

3. Patient Medical Records

- a. Doctors can access patient history, record diagnoses, and upload lab results.

- b. Patients can view their medical history, previous appointments, and prescriptions.

4. Prescription Management

- a. Doctors can write prescriptions directly into the system and send them to a pharmacy if integrated.
- b. Patients can view and download their prescriptions. (To be added)

5. Billing and Payments

- a. Staff can generate invoices based on consultations and procedures.
- b. Patients can view and pay their bills online. (To be Added)

6. Reporting and Analytics

- a. The system will generate reports such as the number of consultations, patient demographics, and revenue analytics.

7. Skin Treatment Record

- a. Doctors can upload images before and after treatment.
- b. Option to annotate images for better tracking of skin conditions.

4. User Interface Design

- **Manager's Perspective**

1. Role Overview

The manager in a derma clinic system is responsible for overseeing operations, ensuring smooth service delivery, managing staff, inventory, and patient schedules, and analyzing business performance. The system should provide tools for administrative tasks, workflow management, and decision-making through data insights.

2. Functional Requirements for the Manager

- **Dashboard for Overview**

- **Functionality:** Provides a summary of clinic operations.

- **Components:** Real-time appointments, clinic performance, staff availability, and financial summaries.
 - **Priority:** High
- **Appointment and Schedule Management**
 - **Functionality:** Manages clinic schedules, staff, and patient appointments.
 - **Components:** Daily/weekly views, staff assignment, rescheduling.
 - **Priority:** High
- **Staff Management**
 - **Functionality:** Manages clinic personnel, including shifts and performance.
 - **Components:** Staff profiles, availability, performance tracking, leave requests.
 - **Priority:** High
- **Inventory Management**
 - **Functionality:** Monitors clinic inventory and manages supply orders.
 - **Components:** Stock levels, low-stock alerts, order tracking, inventory reports.
 - **Priority:** Medium
- **Financial Management**
 - **Functionality:** Monitors financial performance and manages billing and budgets.
 - **Components:** Income/expenses summary, financial reports, billing, insurance claims.
 - **Priority:** High
- **Patient Feedback and Satisfaction Tracking**
 - **Functionality:** Tracks patient feedback and identifies areas for service improvement.
 - **Components:** Feedback overview, satisfaction trends, service reports.
 - **Priority:** Medium
- **Reporting and Data Analytics**
 - **Functionality:** Generates reports for decision-making and performance tracking.
 - **Components:** Custom reports, trend analysis, historical data.
 - **Priority:** Medium