

# MediTrack –Business Analysis Document

## 1. Project Overview

Project Title: MediTrack – Healthcare Appointment & Prescription Management System

Objective:

To analyze and design a healthcare system that enables patients to easily book appointments, view prescriptions, and receive medical care efficiently. The system also helps doctors manage their schedule and prescriptions electronically.



## 2. Scope Statement

In Scope:

- Patient appointment booking and calendar management.
- Prescription creation and access by doctors.
- Notification system for appointment reminders.
- Admin dashboard for user and system management.

Out of Scope:

- Integration with external hospital systems.
- Online payments and billing processing.
- Insurance claim processing.



### 3. Stakeholder Analysis

- Patient – books appointments and accesses prescriptions.
- Doctor – manages schedule and prescribes medications.
- Receptionist – views schedules and manages incoming requests.
- Admin – oversees platform users, data, and reports.



### 4. User Personas

#### 1. Amina – Elderly Patient (Age 62)

- Needs: Easy booking process, reminders via phone or app.
- Pain Point: Difficulty navigating complex apps.

#### 2. Dr. Khaled – Cardiologist

- Needs: Quick access to daily schedule, ability to prescribe in seconds.
- Pain Point: Limited time, forgets to manually record patient history.



### 5. Business Requirements

- BR1: Patients can book appointments via mobile or web.
- BR2: Doctors can add and manage prescriptions electronically.
- BR3: Notifications are sent to patients 24 hours before appointments.

- BR4: The system stores all prescription history by patient ID.
- BR5: Admin users can add, disable, or manage user roles.



## 6. Functional Requirements

- FR1: User login and registration with role-based access.
- FR2: Calendar view of doctor availability.
- FR3: Secure database for storing prescriptions.
- FR4: Notification module to trigger reminders.
- FR5: Admin panel with CRUD functionality for users and appointments.



## 7. Use Case Descriptions

Use Case: Book Appointment

- Actors: Patient, System
- Description: Patient selects date/time and confirms appointment with available doctor.

Use Case: Create Prescription

- Actors: Doctor, System
- Description: Doctor writes and saves a prescription after consultation.



## 8. Activity Flow

Activity: Appointment Booking Process

1. Patient logs in.
2. System shows available slots.
3. Patient selects time and doctor.
4. System confirms appointment and updates schedule.
5. Notification scheduled for reminder.



## 9. User Stories & Acceptance Criteria

Story 1:

As a patient, I want to book an appointment quickly, so I can get medical help on time.

- AC1: System should show available slots by specialty and date.

Story 2:

As a doctor, I want to write digital prescriptions, so I can keep accurate records.

- AC1: Each prescription must be saved and linked to the patient.

Story 3:

As an admin, I want to manage users, so I can ensure only authorized access.

- AC1: Admin panel must support adding and removing users with roles.