
Project Name:

Patient Appointment Management System

Project Sponsor:

Dr. Ayman El-Sayed

Project Manager:

Eng. Marwa Hassan

Date:

October 3, 2025

Project Purpose and Justification:

The aim of this project is to create a system for managing appointments and waiting lists in healthcare facilities such as hospitals and clinics. It also aims to promote digital transformation, improve efficiency, and keep up with modern technology.

Project Description:

A mobile application that enables patients to book appointments and receive reminders via SMS or email. It helps healthcare providers organize time slots for visits. Doctors can also monitor the number of patients and their appointments, ensuring smooth and efficient consultations and follow-ups.

Project Objectives:

- Develop and deploy the system by April 15, 2026
 - Achieve 100% adoption by all hospitals and clinics
 - Reduce the average patient waiting time for appointments by optimizing appointment scheduling logic.
 - Achieve 95% successful delivery of appointment reminders via both SMS and email for all scheduled appointments
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Deliverables:

- Fully functional mobile application
 - Appointment booking, cancellation.
 - Rescheduling and profile management
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Milestones & Timeline:

- Requirements for gathering: Oct 2025
- Design prototype: Nov 2025
- Development: Dec 2025 – Mar 2026
- Testing: Mar 2026
- Deployment & training: Apr 2026

Technical Requirements:

- Platform: The mobile application must be cross-platform compatible with both Android and iOS
- Operating System: Should operate on Android and IOS
- Hardware: Any smartphone purchased in the last 4-6 years. Minimum 2 GB RAM (Though 4 GB+ is preferred), servers requiring minimum 8GB RAM, dual-core processor, and 100GB storage for database and logs.
- Database: Use a scalable relational database system like MySQL or PostgreSQL for storing appointment records, patient administrative profiles, and logs.
- Performance: Support concurrent access by at least 1000 users with page load times under 5 seconds under normal load.
- Security: Role-based access control; data encrypted in transit (TLS) and at rest; comply with data privacy regulations for patient information.
- Integration: API interfaces to connect with hospital and clinics Management System
- User Interface: Responsive design, accessible via smartphones and tablets; user-friendly for patients and clinical staff with basic computer literacy.
- Automation: Real-time waiting list status updates automated daily/monthly reports on no-show rates and provider utilization, and alert notifications for appointment changes.
- Backup and Recovery: Regular automated backup of critical data with restoration capability to minimize downtime.
- Logging and Auditing: Maintain logs of user actions and appointment changes for security audits and compliance.

Limits and Exclusions:

- This project will not develop a web application service; only a mobile-based platform is included
- The app will not use GPS to track the patient's location. Arrival/check-in is manual
- The app will only talk to the hospital's or clinic's appointment calendar system. It will not give patients access to their full medical records
- Any future enhancements or expansions will require separate project approval and funding.
- The project is limited by the allocated budget and timeline; no additional resources will be provisioned without formal amendment.

Approval:

- Project Sponsor: _____ Date: _____
 - Project Manager: _____ Date: _____
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Names:

- .George Mohsen Farouk
- .George Gamal Ayoub
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- .Peter Emad Abdalbaqa
- .Peter Yohana Abdalmalak
- .Tomas Atef Khair