Project Name:
Smart Polyclinic Management System

Project Sponsor:
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Project Manager:
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Date:
October 6, 2025

Project Purpose and Justification:
The purpose of this project is to develop an intelligent web-based system that manages and organizes all operations inside a multi-specialty clinic.
This system will replace manual processes such as appointment scheduling, patient record keeping, and doctor evaluation tracking.
By automating these tasks, it will reduce human errors, save time, and enhance service quality.
The project supports the clinic's vision of digital transformation and aims to improve overall efficiency, patient satisfaction, and administrative control.

Project Description:
This project involves developing a web-based intelligent system designed to manage the daily operations of a multi-specialty clinic.
The system will allow patients to book appointments online, view their previous visits, diagnoses, and digital prescriptions.
Doctors can manage their schedules, update patient records, and review feedback and performance reports.
The administration will have full access to monitor activities, analyze evaluations, and generate automated reports to improve service quality.
The system integrates both human and artificial intelligence management:
AI will handle automated tasks such as analyzing doctor ratings, sending reminders and smart notifications to patients and doctors, and generating performance reports,
while human administrators will supervise decisions and ensure quality control.
The project aims to create a more organized, efficient, and transparent environment that enhances the overall experience for both doctors and patients.

Project Objectives:
1. To design and develop a smart web-based system that manages all operations of a multi-specialty clinic efficiently.
2. To automate appointment scheduling, patient record management, and doctor evaluation

processes to reduce human error and save time.
3. To provide patients with secure access to their medical history, diagnoses, and digital prescriptions.
4. To allow doctors to manage their schedules, review patient data, and receive smart reminders and notifications.
5. To enable the administration to monitor performance, generate automated reports, and analyze feedback for decision-making.
6. To integrate artificial intelligence for data analysis, smart alerts, and system optimization.

Deliverables:

1. Smart web-based clinic management system that allows patients to view their data securely, doctors to manage patient records, and administrators to control all operations efficiently.
2. Automated features for appointment scheduling, doctor evaluation, and report generation to save time and reduce human error.
3. Secure database to store patient information, diagnoses, and prescriptions.
4. AI-powered functions for sending reminders, smart notifications, and analyzing doctor performance and patient feedback.
5. Administrative dashboard that provides performance summaries, statistics, and detailed reports for management decisions.

Milestones & Timeline:

- Requirements Gathering – October 2025
- System Design – November 2025
- Development – December 2025 to February 2026
- Testing – March 2026
- Deployment & Training – April 2026

Technical Requirements:

- Platform:

The system will be a web-based application accessible through modern browsers such as Chrome, Firefox, and Edge.

- Operating System Compatibility:

The system should operate smoothly on Windows 10/11, macOS, and Linux environments.

- Hardware Requirements:

Clinic computers and servers should have a minimum of 8GB RAM, dual-core processor, and 100GB storage for the database and system files.

- Database:

A relational database management system (RDBMS) such as MySQL or PostgreSQL will be used to store and manage patient records, appointments, and reports.

- Security:

The system will implement role-based access control, ensuring each user (patient, doctor, admin) accesses only relevant information.
Data will be encrypted during transfer (using TLS) and securely stored in the database.

- Performance:

The system should support simultaneous access by at least 100 users, with page load times under 5 seconds.

- AI Integration:

Artificial Intelligence components will handle automatic notifications, smart reminders, and performance analysis.

- Backup and Recovery:

The system will include automatic data backup and quick recovery options to prevent data loss.

Limits and Exclusions:

- This project will not develop a mobile application version of the clinic management system; only a web-based platform is included.

- Integration is limited to the clinic's internal systems and database, excluding third-party or external healthcare systems.

- Hardware procurement or upgrades (such as new servers or devices) are excluded and will be handled separately by the clinic's technical support or system provider.

- This project excludes providing advanced telemedicine features such as remote health monitoring or video consultations; appointments are managed automatically within the web system using AI-based scheduling to reduce human error and avoid overlapping times.

- User guidance will be provided through a simple help page within the system, explaining how to use its main features.

- Any future enhancements or expansions, such as adding a mobile version or new AI modules, 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: _____