# Project Scope – PEMDAS

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## 1. Project Purpose

The PEMDAS project aims to simplify and improve daily health monitoring for users through an intelligent mobile and web-based application. It allows users to store and manage their medical records, track medications and appointments, and receive personalized health and nutrition advice using artificial intelligence. The goal is to enhance users’ health awareness and support them in maintaining healthy lifestyles through technology.

## 2. Project Objectives

* Develop a smart and user-friendly mobile and web application.
* Provide reminders for medications and appointments to ensure consistent healthcare.
* Use AI to deliver personalized health and nutrition advice tailored to each user.
* Encourage self-care and health awareness through continuous guidance.

## 3. Scope (Inclusions)

* Secure user registration and authentication.
* Electronic medical record management, including diseases, medications, and appointments.
* AI-powered recommendation system for health and nutrition tips.
* Smart reminders for medication schedules and upcoming appointments.
* Responsive UI compatible with Android, iOS, and modern web browsers.
* Backup and data recovery system to protect user health data.
* Logging and auditing features to track user activity securely.

## 4. Exclusions

* Integration with hospital, pharmacy, or insurance systems.
* Real-time location tracking or emergency response.
* Advanced medical diagnosis or treatment prediction.
* Hardware procurement (mobile devices, servers).
* Future upgrades or new advanced features (will require separate funding).

## 5. Key Deliverables

* Fully functional mobile and web application.
* AI health recommendation module.
* User manual and training sessions.
* Database and backup system.
* Testing and evaluation reports.

## 6. Milestones and Timeline

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| Milestone | Target Date |
| Requirements Gathering | October 2025 |
| Design Prototype | November 2025 |
| Development Phase | December 2025 – March 2026 |
| Testing Phase | April 2026 |
| Deployment & Training | May 2026 |

## 7. Constraints

* The project must be completed within the approved schedule and budget.
* Development tools and environments must comply with university guidelines.
* All data privacy and security standards (HIPAA/GDPR) must be maintained.

## 8. High-Level Risks

* Scope Creep: Uncontrolled expansion of requirements.
* Data Privacy Risks: Breach or misuse of sensitive health data.
* AI Accuracy: Incorrect or irrelevant health advice.
* Technical Delays: Integration or compatibility issues across platforms.
* User Adoption: Users may find the system complex or difficult to use.

## 9. Key Resources

Human Resources: 1 Project Manager, 2 Android Developers, 1 iOS Developer, 1 Backend Developer, 1 UI/UX Designer.

Hardware: 5 laptops, 1 testing server.

Software: Android Studio, Xcode, VS Code, Database server (MySQL/PostgreSQL).

## 10. Success Criteria

* The system runs smoothly on Android, iOS, and Web.
* Medication and appointment reminders work accurately.
* AI suggestions are relevant and consistent.
* Users report satisfaction ≥ 80% in feedback survey.
* System passes all functional and performance testing.