IT Project 700 Project 2025 – Phase 3
Project Proposal: Doctor Appointment & Office Management System (Enhanced)

Group Members

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Introduction

The goal of this project is to develop a simple affordable platform for doctors and clinics to manage patient appointments and communication. While many scheduling tools are available, they are often expensive, overly complex, or not well-suited for smaller or rural clinics.

1. Purpose of the Project

The goal of this project is to develop a simple affordable platform for doctors and clinics to manage patient appointments and communication. While many scheduling tools are available, they are often expensive, overly complex, or not well-suited for smaller or rural clinics.

This project aims to address that gap by offering:
- Multi-channel booking: Patients can book via WhatsApp, SMS, or website.
- A basic health questionnaire: To highlight urgent cases.
- Offline mode: Ensures functionality even with limited internet access.
- Queue management: Real-time wait time updates and patient notifications.
- Analytics dashboard: Tracks trends such as no-shows and peak hours.

Key Problems Solved:
- Reduces missed appointments through reminders.
- Saves time by centralizing billing, records, and scheduling.
- Improves communication between patients and clinics.
- Helps doctors manage time and resources more effectively.

2. Implementation Languages

We will use Python as the main programming language.
- Language: Python
- Database: SQLite or MySQL
- Front-End: HTML, CSS, JavaScript (small UI)

3. SDLC Model: Agile

We will follow the Agile methodology for its flexibility, emphasis on collaboration, and regular feedback through iterative sprints.

4. Sprint Planning (6 Sprints – 6 Members)

Sprint	Focus	Team Member	Description
1	Project Setup & Database Design	Member 1	Set up development environment, plan architecture, create DB tables
2	Appointment Booking System	Member 2	Build core booking module (web form)
3	Queue Management System	Member 3	Implement real-time updates and notifications
4	AI Triage Assistant	Member 4	Develop questionnaire and flag urgent cases
5	Offline Mode & Integration	Member 5	Add offline support and integrate modules
6	Analytics Dashboard & Final Testing	Member 6	Build a reporting dashboard and conduct final testing

Sprint Duration: 1–2 weeks with regular testing and review after each sprint.

5. Revenue Model (Optional)

- Freemium model: Free basic booking functionality.
- Per-booking fee: Small charge for each confirmed appointment.

6. Alternative Ideas Considered

- College/University Booking System
- Small Business Workflow Hub (Inventory System)
- University App (more personalized to each student)

After discussion and voting, the team selected the Doctor Appointment & Office Management System as the preferred project.

7. Additional Notes

The reason for splitting into sprints is that each member will have time to manage a sprint (might use GitHub to give the team exposure to Git).

References

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