IOT-AI POWERED HEALTHCARE

NETWORK SYSTEM

PROJECT SYNOPSIS
OF MINI PROJECT

Master Of Computer Application

Proposed By

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1. Project Title

IOS Mobile Application Development for Affordable and Highly Available IOT-AI Powered Healthcare Network System.

2. Objective of the Project

We are developing an iOS application related to the healthcare sector. The app will allow users to securely log in using their credentials and access their personalized healthcare data. In this project, the primary focus is to develop the Login Page, Patient Dashboard, Doctor Dashboard, and Administration Dashboard. The application is being developed using Python and the Kivy framework, with MySQL serving as the database backend.

3. Problem Statement

In the current healthcare system, patient data management and accessibility are often fragmented across multiple platforms. This leads to inefficiencies and challenges in communication between patients, doctors, and administrators. There is a need for a unified, secure, and accessible platform to manage healthcare data efficiently.

4. Scope of the Project

The project focuses on developing a healthcare iOS application that allows patients, doctors, and administrators to interact with a centralized system. The system will provide dashboards for different users, facilitating data access and management. This project will focus only on the development of the user authentication module and the three dashboards mentioned.

5. Existing System

Existing healthcare management systems are often web-based and lack dedicated mobile applications for iOS users. Additionally, they may not integrate IoT and AI features or offer user-friendly dashboards for different stakeholders.

6. Proposed System

The proposed system introduces an iOS-based application that provides an efficient, secure, and user-friendly interface for healthcare management. Using Python with the Kivy framework, the app will feature dashboards for patients, doctors, and administrators. MySQL will be used as the backend database to manage and retrieve user data effectively.

7. System Requirements

- **Hardware Requirements:**
  - **iPhone or iPad device (iOS 15 or higher recommended)**
  - **macOS development environment with Xcode**
  - **Minimum 8GB RAM and 128GB storage**
- **Software Requirements:**
  - **Python**
  - **Kivy Framework**
  - **MySQL Database• Xcode or suitable iOS development environment**

8. Modules of the Project
- **User Authentication Module – Allows secure login using user ID and password.**
- **Patient Dashboard – Displays patient details, medical history, and reports.**
- **Doctor Dashboard – Provides access to patient information and consultation schedules.**
- **Administration Dashboard – Manages users, records, and system settings.**

9. Methodology / Technologies Used
- **Development Language: Python**
- **Framework: Kivy**
- **Database: MySQL**
- **Platform: iOS**
- **Development Environment: macOS / Xcode**

10. Expected Outcome
The outcome of this project will be an iOS mobile application prototype that enables seamless communication between patients, doctors, and administrators. It will serve as a foundation for an IoT-AI powered healthcare network system that ensures affordability, accessibility, and data availability.

11. Future Enhancement
Future improvements may include integration of IoT devices for real-time patient monitoring, AI-based analytics for predictive healthcare, and cloud synchronization for better scalability and performance.

12. Conclusion
The project demonstrates the development of a healthcare management system designed for iOS devices using Python and Kivy. It provides essential functionalities like authentication and dashboard management for different stakeholders. This serves as a significant step towards creating an affordable and AI-powered healthcare network system.

13. References
- **Apple Developer Documentation**
- **Python.org**
- **Kivy Framework Documentation**
- **MySQL Developer Guide**
- **iOS Human Interface Guidelines**