

Patient Health Record Management System

Digital Solutions for Modern Healthcare

MINI PROJECT PROGRESS REPORT

By-

Shaambhavi Singh(Roll no-22)

Shashank Kumar(Roll no-23)

Shashank N P(Roll no-24)

The healthcare challenge

Patient health records are essential for effective healthcare. Digital management improves care and reduces errors even with limited resources.



Patient Health Record Management System Vision

Management

Complete workflow

Enable adding new patient records, viewing existing information, and updating patient details as needed.

Updates

Editing capabilities

Provide robust functionality to update patient information ensuring records remain accurate and current.

Maintenance

Deletion system

Implement functionality for removing outdated records to maintain system efficiency and data relevance.

Storage

Digital solution

Store and maintain basic patient demographic information in a digital system for efficient record keeping.

These core features allow users to input and store new patient information, retrieve and display patient records, update existing patient information, and remove patient records from the system.



The system will focus on four essential features that form the foundation of any health record management system: Add Patient, View Patient, Edit Patient, and Delete Patient.



Approach

Technical approach with accessible technologies



VS Code environment

Comprehensive development environment supporting the learning process for new programmers.



Tkinter interface

Python's standard GUI toolkit that allows for progressive learning during development.



SQLite database

Lightweight database system requiring minimal setup while building a functional system.



Python language

Selected for its simplicity and readability, perfect for first-year students with limited coding experience.

System workflow

The system follows a straightforward flow of information.



Information retrieval

Stored data can be accessed, modified, or deleted as needed. This flexible retrieval system allows for efficient management of patient records.



User interface interaction

The workflow begins with user input through the interface and concludes with displaying patient information to users, creating a complete input-output cycle.



Data processing and storage

User input is validated and prepared before being saved securely in the database. This ensures data integrity and organization throughout the system.

Project Timeline

The project has been planned over a 5-week period with realistic milestones: -

Week 1: Research and requirement gathering (Completed)

Week 2: Learning Python basics and database concepts (In progress)

Week 3: System design and interface mockups

Week 4: Basic coding and database implementation

Week 5: Testing, debugging, and documentation

Learning Journey

As this our first programming project, we've encountered several challenges and developed strategies to overcome them: -

Limited Programming Experience:

Following online Python tutorials on Codecademy and YouTube - Database

Knowledge: Learning basic SQL through W3Schools online resources - GUI

Development: Exploring Tkinter documentation and example projects - Time

Management: Created a study schedule to balance project work with regular coursework

Current Progress

At this early stage of the project, we've made the following progress:

- Completed research on patient record management systems
- Identified the core features needed for a basic system
- Started learning Python fundamentals through online courses
- Created initial system design sketches
- Researched database options suitable for beginners
- Developed this project plan and presentation

Next Steps

Moving forward, our immediate next steps include:

- Continue Python and SQLite tutorials to build necessary skills
- Develop detailed mockups of the user interface
- Create a basic database schema for patient records
- Begin coding the add patient functionality as a first module
- Schedule regular check-ins with our project advisor
- We welcome any guidance on resources that might help with learning Python more efficiently and best practices for simple database design.

THANK YOU