CS-196 Project ideas

1. Friendoc

Friendoc is an app to store, and analyze electronic health records (EHR) and provide real-time interventions. The project will leverage the Python programming language for developing the core functionality, data analysis, and user interface. Python's libraries will be used for creating an intuitive graphical user interface (GUI) and visualization components. To store and manage EHR data, a robust and secure database system, like MySQL, will be employed, with Python libraries like SQLAlchemy or Django ORM handling the CRUD (create, read, update, and delete) operations. The focus of this project lies in developing an accessible and comprehensive tool that effectively utilizes GUI and database storage technologies to assist healthcare professionals in managing patient readmission risks.

1. login/authentication screen
2. Dashboard with key metrics
3. Patient list and search functionality
4. Patient profiles with EHR data
5. Risk assessment and intervention suggestions
6. Care team notifications and communication
7. Patient progress tracking
8. Settings and customization options

Project Idea: Medication Reminder and Health Journal

Overview:

RemindMe is a medication reminder and health journal application to help users manage their medication schedules and track health-related information. The application will feature a graphical user interface (GUI) for easy data input and visualization and a database for secure data storage and retrieval.

Features:

1. User registration and login:
   * Secure authentication system for user data protection.
2. Medication management:
   * Users can add, edit, and delete medications, including dosage, frequency, and duration.
   * Set up reminders for medication intake, with customizable notification settings.
3. Health journal:
   * Users can record daily health-related information, such as symptoms, exercise, and dietary habits.
   * Attach photos or documents, like prescriptions or lab results, to journal entries.
4. Calendar view:
   * Visualize medication schedules and health journal entries on a daily, weekly, or monthly calendar.
5. Reporting and visualization:
   * Generate reports summarizing medication adherence and health journal data.
   * Visualize trends and patterns in health-related information using charts and graphs.
6. Export and backup:
   * Users can export their medication schedules and health journal data for sharing with healthcare providers.
   * Automatic backup of user data to prevent data loss.
7. Database integration:
   * Store user data, medications, and health journal entries securely in a database.

This medication reminder and health journal application will help users manage their medications and maintain a record of their health-related information more effectively. The project will utilize GUI design, database management, and data visualization techniques for healthcare.