Alfredo Rosario 5May25

**CIS Final Project Report**

This Pharmacy Portal was built to meet the main requirements of the final project: to create a functional web application using PHP and MySQL that supports different user types and gives them access to relevant features. The idea was to simulate a real-world pharmacy system where users could log in, view or manage prescriptions, and for pharmacists, keep track of medication inventory. While the original plan included hashed password security, I decided to simplify login functionality for testing purposes, which helped to focus more on the structure and flow of the portal.

The backend uses MySQL to manage the main tables Users, Medications, Prescriptions, and Inventory. Each table plays a role in how the system functions. The Users table holds information like name, contact, and role (either patient or pharmacist), which determines what each person sees and can do once logged in. For example, Aaron Judge and Herbert Lehman are both set as patients, while Dr. Strange is the pharmacist. The Medications table contains stock data like medication name, dosage, manufacturer, and current inventory. I inserted new entries manually to make sure the demo was clean and consistent. These entries are tied to what users see on the front end, and they help test how views change based on roles.

When it comes to the user experience, the homepage takes you to a login screen where you enter a username and choose a role. Once you're in, the front end is controlled by the session data and your user type. Patients get a simple interface that only shows them prescription-related features. Pharmacists, on the other hand, can see inventory and handle more advanced tasks. I set up access control on the backend so even if a patient tries to go to a pharmacist page directly using a URL, it won’t let them through. This helps enforce proper boundaries between roles. The front end was styled for clarity.

Overall, this project came together well. It covers the core idea of using sessions, user roles, and MySQL to manage a small system. It also shows how the front and back end can work together to create a smooth experience depending on who’s logged in. There are places where the system could be improved for real world application to include HIPPA certification standards and metrics but for the scope of the assignment, it hits all the major points.