CIS 344 Pharmacy Portal Project Report
By Ilma Zarin

For this project, I created a simple pharmacy portal website using PHP and MySQL. The goal was to build a system where both pharmacists and patients could log in and access helpful tools. Pharmacists are able to manage medications, prescriptions, and inventory. Patients can log in to view their own prescriptions. This kind of system would help make managing a pharmacy more organized and efficient.To build this project, I used two main technologies: PHP and MySQL. PHP is the coding language used to make the website run and MySQL is the database that stores all the information like user accounts, prescriptions, and medications.

The website has a login system where a user can choose to log in as either a pharmacist or a patient. When someone logs in for the first time, the system checks if they are already in the database. If they are not, it automatically adds them. After logging in, the user is taken to a dashboard page that shows different options depending on their role. For example, a pharmacist can add new medicines and prescriptions, but a patient can only view their prescriptions.

In the database, I created several tables. These include:

- Users: This table stores all the user information, such as name, contact info, and user type (pharmacist or patient).

- Medications: This table holds the names of medications, their dosages, and manufacturers.

- Prescriptions: This table links patients with their prescriptions, showing which medication was prescribed, how much of it, and instructions for taking it.

- Inventory: This table keeps track of how much of each medication is currently in stock.

- Sales: This table records each time a medication is sold and updates inventory automatically.

To make the database smarter, I also added a stored procedure called AddOrUpdateUser which either adds a new user or updates an existing one. Another stored procedure called ProcessSale handles selling medication and updates the inventory. There is also a trigger in the database that automatically reduces inventory every time a new prescription is added. A view called MedicationInventoryView was created to easily show a list of all medications and their stock levels.

I created seven PHP files to make the website work. Each file has a specific job. PharmacyDatabase.php connects to the database and runs all the main functions. login.php handles the login process, while logout.php ends the session. dashboard.php shows the options available depending on who is logged in. Pharmacists use addMedication.php and addPrescription.php to enter new information. Patients can use viewPrescriptions.php to see their own prescription records.

I tested everything by adding sample data into each table. I included three users (two patients and one pharmacist), three medications, and a few prescriptions and inventory entries. This helped make sure everything works correctly.The system is designed to be simple but secure. Each user has their own login session, and pharmacists and patients are given different access to pages. Patients can’t make changes, they can only view their information. Pharmacists, however, can add medications, add prescriptions, and manage stock.

In conclusion, this project helped me understand how to connect a website to a database and create a working system that is useful in the real world. It showed me how websites and databases work together to keep everything organized and accessible. I believe this kind of project could be a helpful tool for small or local pharmacies that need a simple way to manage prescriptions and inventory online.