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**Pharmacy Portal Project Report**

This project, the Pharmacy Portal, was built to fulfill the core requirements of a web-based system that manages prescriptions, medications, and user access control. The goal was to simulate how a pharmacy might track its prescriptions, view inventory, and manage users while differentiating between two types of users: patients and pharmacists. The portal had to include multiple SQL tables, offer secure login functionality, and create role-based views for different users all while functioning through a front-end HTML/CSS interface supported by PHP and a MySQL database on the back end.

At the core of the system are several MySQL tables: Users, Medications, and Prescriptions. Each user has a role (either 'patient' or 'pharmacist'), which determines what parts of the portal they can access. When a patient logs in, they are welcomed by name and are only able to view their own prescriptions. For security and access control, the system checks the logged-in user's session and filters the data shown accordingly. In contrast, when a pharmacist logs in, they have full visibility into all prescriptions and can also view the medication inventory. This is where the role-based logic comes into play any sensitive or administrative features, like viewing all users or seeing stock levels, are locked behind pharmacist access only. This helps simulate a real-world distinction between patient and medical professional access.

The user interface uses forms and buttons to allow interaction with the database. The login system uses session tracking to maintain user state across pages, and the system is set up to dynamically respond to different types of users. While patients can view and understand their own prescription details, pharmacists get a more administrative dashboard, which includes access to medication inventory and potentially the ability to add new pharmacist users. Although the ability to update stock quantity was discussed, it was not implemented in this version of the project but the groundwork is there if we want to expand the functionality later.

In conclusion, this project demonstrates how a role-based system can be built using PHP, MySQL, and front-end web technologies. It meets the core requirements of managing prescriptions, medications, and users while clearly separating access between patients and pharmacists. The login and navigation structure makes it easy for both user types to access only what they need, and the use of session tracking and SQL queries ensures data privacy and control. This system could easily be expanded in the future with more administrative features like stock updates, prescription refills, or user analytics but as it stands now, it successfully creates a simple but functional digital pharmacy experience.