

Priscilla Alexander

Warehouse Inventory Project

Due Date 11/11/25

1. Project Scope

The Warehouse Inventory Management System is a web-based application designed to manage products, warehouses, orders, and shipments efficiently. It allows administrators to track product quantity, add/edit products, create shipments, and manage orders from a central dashboard.

GitHub: https://github.com/PriscillaAlexan/Warehouse_inventory-project2.git

The database is designed to manage a warehouse inventory system. It stores information about:

- Products
- Warehouses
- Inventory (product quantities per warehouse)
- Suppliers
- Orders
- Shipments
- Users (for authentication)

The database is implemented in MySQL and uses foreign keys to maintain relationships between tables.

2. Initial Design Plan

- **Frontend:** using HTML, CSS, and JavaScript.
- **Backend:** PHP.
- **Database:** MySQL for storing products, warehouses, orders, shipments, and suppliers.

- **Features:**

- Dashboard overview.
- Products
- Order creation and tracking.
- Shipment management with new warehouse/product creation.
- User authentication with session management

3. Technical Details

Backend Structure

- backend/index.php — (products.php, orders.php, shipments.php, auth.php).
- backend/config/db.php — Database connection and session handling.
- backend/api/warehouse.php — Returns a list of warehouses with total stock using SQL JOINS.
- **Logic:** Uses LEFT JOIN to get all warehouses and sum their stock quantities. COALESCE ensures that warehouses with no inventory still return 0.

config/db.php

- Purpose: Provides a single point of database connection and session management for the backend.
- Key functionality:
 - Connects to MySQL using PDO with proper error handling.
 - Sets PDO::ATTR_ERRMODE to ERRMODE_EXCEPTION to catch SQL errors.
 - Starts PHP session for authentication.

index.php –

- Responsibilities:
 - Determine which API endpoint should handle the request (products.php, orders.php, etc.).

4. User Guide

Logging In

1 Enter your **email** and **password** and click **Login**.

Dashboard Overview

- Shows a summary of:
 - **Products:** ID, SKU, name, stock, and location.
 - **Orders:** Last 5 orders with quantity and status.
 - **Shipments:** Last 5 shipments with warehouse, type, and date.
- **Navigation:** Use top buttons to switch to Products, Orders, or Shipments.

Managing Products

1. Go to **Products** tab.
2. Click **New** (admin only) to add a product:
 - Fill details: SKU (auto-generated), Name, Description, Cost, Price, Supplier, Warehouse, Quantity.
 - Click **Save** to add the product.
3. **Edit Product:** Click **Edit** button next to a product.
4. **Delete Product:** Click **Delete** button next to a product.

Managing Orders

1. Go to **Orders** tab.
2. Click **New Order** (admin only):
 - Select a product and quantity.
 - Enter customer name.
 - Click **Create**.
3. **Delete Order:** Click **Delete** button next to an order.

Managing Shipments

1. Go to **Shipments** tab.
2. Click **New Shipment** (admin only):

- Select **Shipment Type** (IN/OUT).
- Select existing warehouse or add new warehouse.
- Select product or add new product.
- Enter quantity and optional reference.
- Click **Create**.

Search and Filter

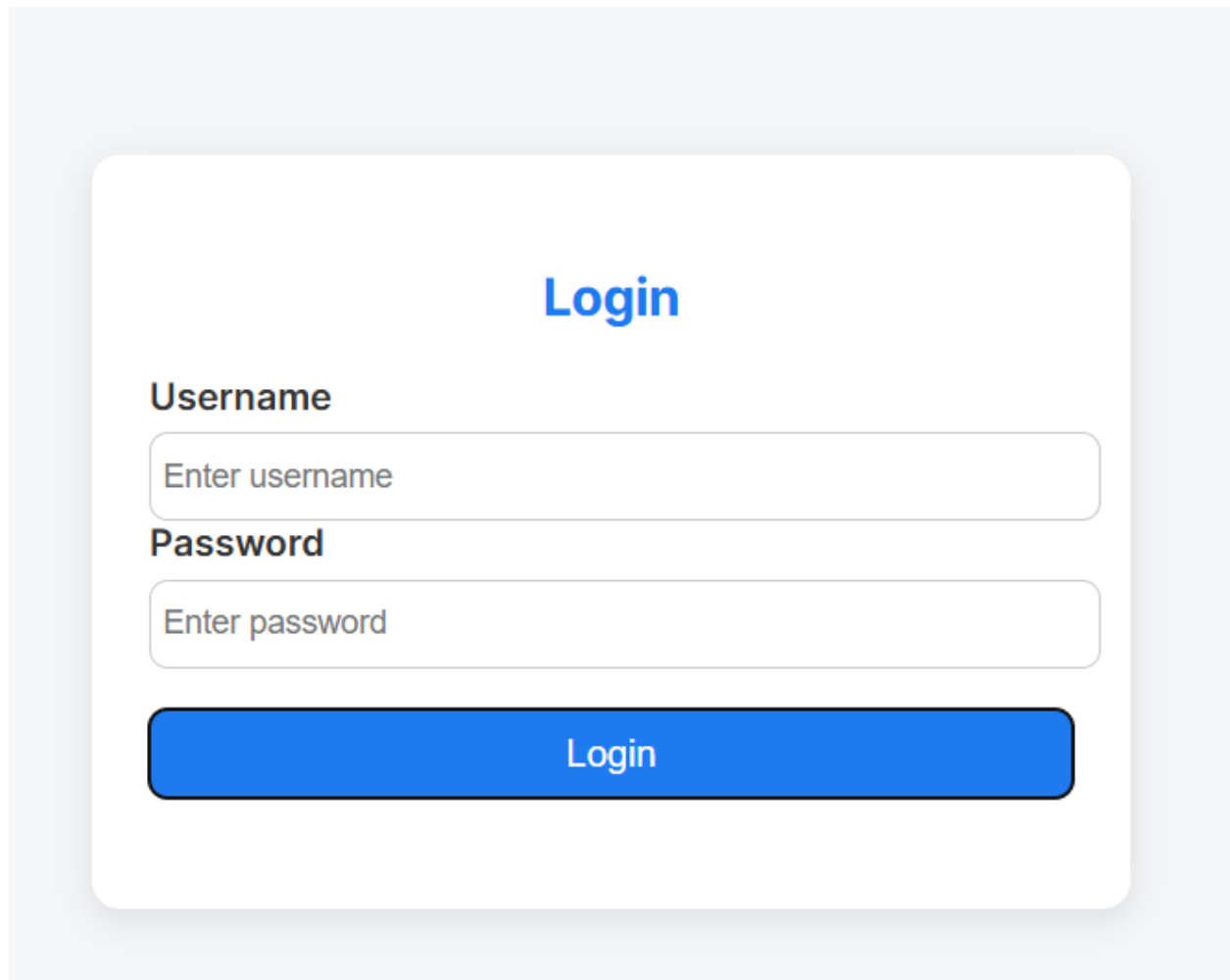
- Use the search input on Products, Orders, or Shipments pages to filter the table by name, SKU, or order number in real-time.

Logout

- Click **Logout** on the top right to end the session.

5. Screenshots

Login Screen:

A login screen mockup featuring a white rounded rectangle centered on a light gray background. The rectangle has a subtle drop shadow. At the top center of the rectangle is the word "Login" in a bold, blue, sans-serif font. Below this, the label "Username" is positioned to the left of a white input field with a thin gray border. The input field contains the placeholder text "Enter username". Directly below the username field, the label "Password" is positioned to the left of another white input field with a thin gray border, containing the placeholder text "Enter password". At the bottom of the rectangle is a solid blue button with rounded corners and a thin black border, containing the word "Login" in white text.

Login

Username

Enter username

Password

Enter password

Login

Dashboard screen:

DashboardProductsOrdersShipments

Logout

Dashboard Overview

Products Summary

ID	SKU	Name	Qty	Location
1	SKU-001	Box (Small)	144	Karachi, Lahore
2	SKU-002	Tape (Packing)	200	Karachi
3	SKU-003	Bubble Wrap	50	Karachi

Recent Orders

ID	Order #	Qty	Status
1	ORD-1001	5	PENDING

Recent Shipments

ID	Type	Warehouse	Items	Date
4	IN	Main Warehouse	1	2025-11-05 01:02:31
5	IN	New test	0	2025-11-05 01:08:15
6	IN	Secondary Warehouse	0	2025-11-05 01:33:59

Products Screen:

DashboardProductsOrdersShipments

Logout

Products

New

Search products...

ID	SKU	Name	Acquire Cost	Price	Qty	Location	Actions
1	SKU-001	Box (Small)	1.00	7.20	144	Lahore, Karachi	<div>EditDelete</div>
2	SKU-002	Tape (Packing)	2.00	4.50	200	Karachi	<div>EditDelete</div>
3	SKU-003	Bubble Wrap	3.00	6.00	50	Karachi	<div>EditDelete</div>

New Product addition Screen:

New Product

SKU:

Name:

Description:

Acquire Cost:

Quantity:

Price:

Supplier:


Warehouse Name:

Location:

Edit Products screen:

Dashboard **Products** Orders Shipments

Logout

 **Edit Product**

SKU

Name

Acquire Cost

Price

Warehouse

Order screen:

DashboardProductsOrdersShipments

Logout

Orders

New Order

ID	Order #	Products	Qty	Status	Actions
1	ORD-1001	Box (Small)	5	PENDING	<div>Delete</div>

New order screen:

DashboardProductsOrdersShipments

Logout

+ Create New Order

Order Number

ORD-D552B6

Customer Name

John Doe

Select Product

Box (Small) (Stock: 144)

Quantity

Enter quantity

Create

Cancel

Shipment Screen:

DashboardProductsOrdersShipments

Logout

Shipments

+ New Shipment

ID	Type	Reference	Total Items	Products	Warehouse	Date
4	IN	-	1	Box (Small)	Main Warehouse	2025-11-05 01:02:31

New shipment screen:

DashboardProductsOrdersShipments

Logout

+ Create New Shipment

Shipment Type

IN

Warehouse

-- Select Warehouse or Add New --

Product

-- Select Product or Add New --

Quantity

Enter quantity

Reference

Optional reference

Create

Cancel