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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](#)

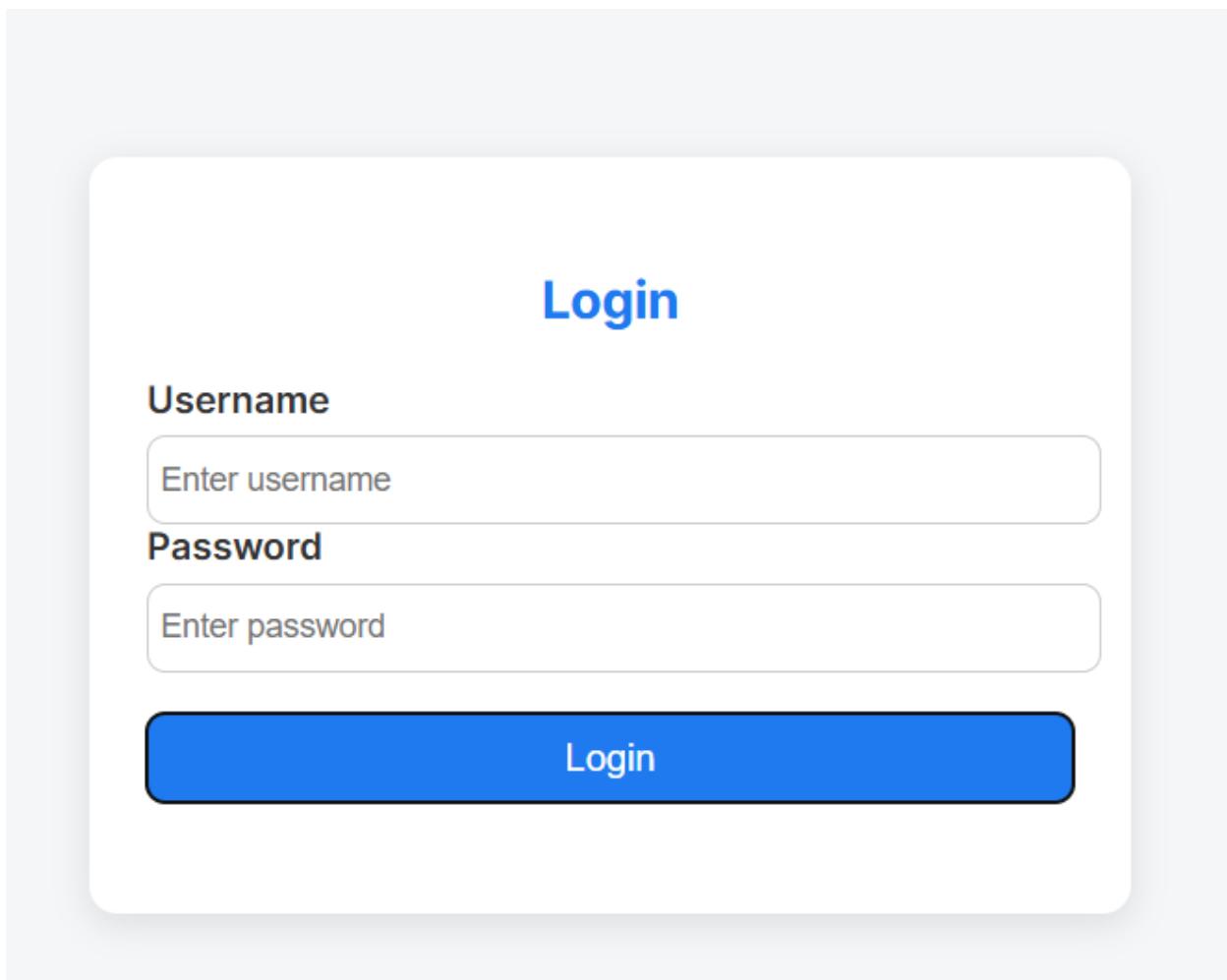
- Use the search input on Products, Orders, or Shipments pages to filter the table by name, SKU, or order number in real-time.

[Logout](#)

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

5. Screenshots

Login Screen:



Dashboard screen:

Dashboard Products Orders Shipments 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:

Dashboard Products Orders Shipments 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	<button>Edit</button> <button>Delete</button>
2	SKU-002	Tape (Packing)	2.00	4.50	200	Karachi	<button>Edit</button> <button>Delete</button>
3	SKU-003	Bubble Wrap	3.00	6.00	50	Karachi	<button>Edit</button> <button>Delete</button>

New Product addition Screen:

New Product

SKU:
SKU-412824

Name:
Product Name

Description:
Product Description

Acquire Cost:
0

Quantity:
0

Price:
0

Supplier:
Select Supplier

Warehouse Name:
Warehouse Name

Location:
Warehouse Location

Save Cancel

Edit Products screen:

✎ **Edit Product**

Dashboard Products Orders Shipments Logout

SKU
SKU-001

Name
Box (Small)

Acquire Cost
1.00

Price
7.20

Warehouse
-- Select Warehouse --

Save Cancel

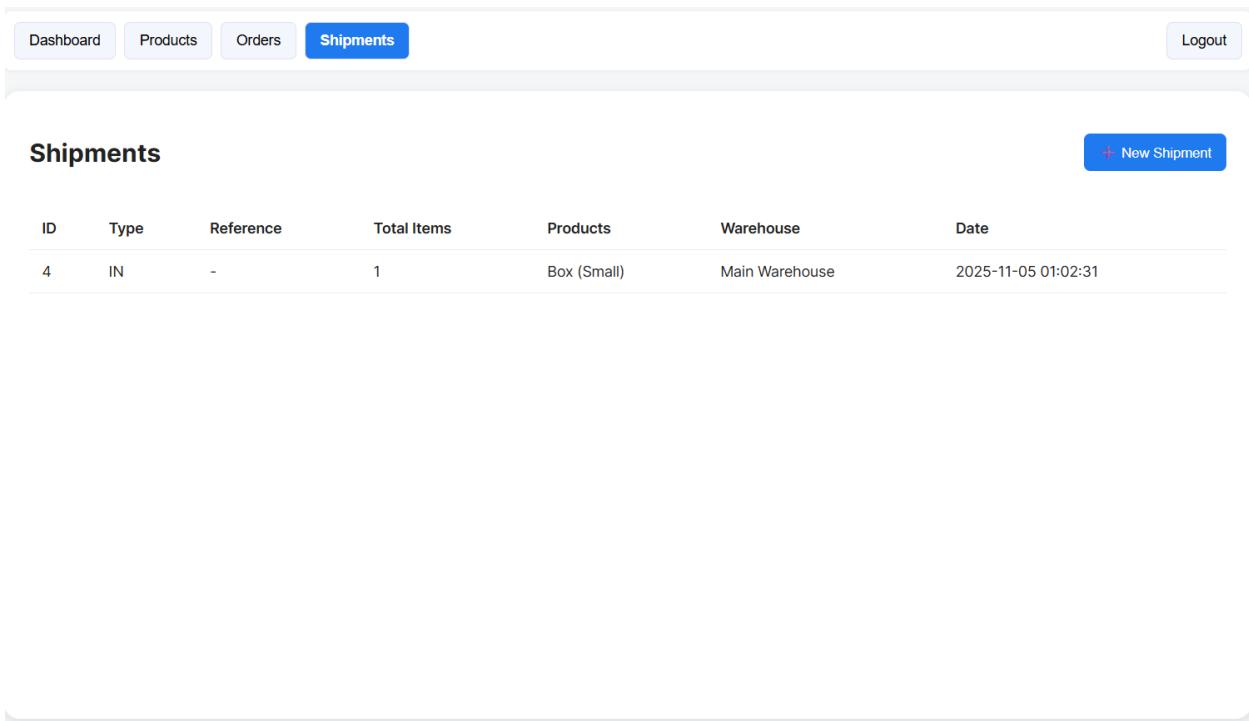
Order screen:

The screenshot shows a web-based application interface for managing orders. At the top, there is a navigation bar with five tabs: Dashboard, Products, Orders (which is highlighted in blue), Shipments, and Logout. Below the navigation bar, the page title is "Orders". In the top right corner of the main content area, there is a button labeled "New Order" with a plus sign icon. The main content area displays a table with one row of data. The columns are labeled ID, Order #, Products, Qty, Status, and Actions. The data row shows: ID 1, Order # ORD-1001, Products Box (Small), Qty 5, Status PENDING, and Actions which includes a red "Delete" button.

New order screen:

The screenshot shows a "Create New Order" form. At the top, there is a navigation bar with four tabs: Dashboard, Products, Orders (highlighted in blue), and Shipments, followed by a Logout button. The main form has a heading "+ Create New Order". It contains several input fields: "Order Number" with the value "ORD-D552B6", "Customer Name" with the value "John Doe", "Select Product" with a dropdown menu showing "Box (Small) (Stock: 144)", and "Quantity" with a text input field containing "Enter quantity". At the bottom of the form are two buttons: a blue "Create" button with a small icon and a grey "Cancel" button.

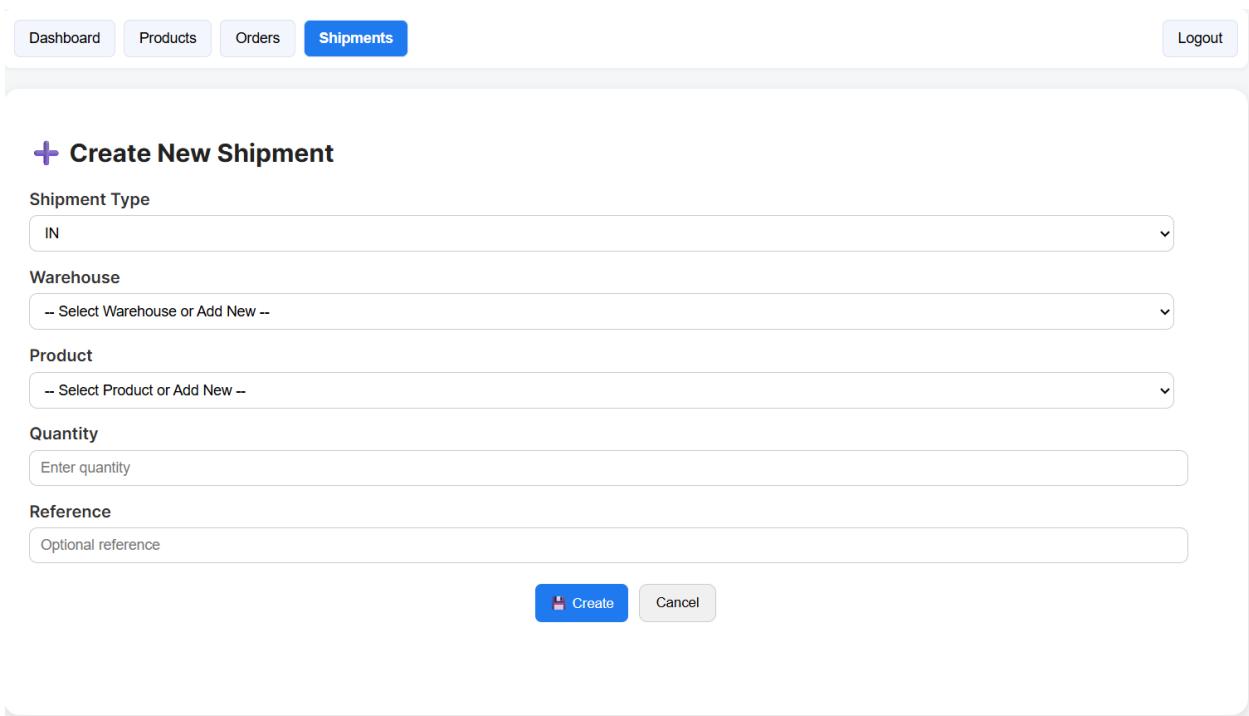
Shipment Screen:



The screenshot shows a web-based application interface for managing shipments. At the top, there is a navigation bar with four tabs: "Dashboard", "Products", "Orders", and "Shipments". The "Shipments" tab is currently selected and highlighted in blue. On the far right of the header is a "Logout" button. Below the header, the page title "Shipments" is displayed in bold black text, followed by a blue button with a plus sign and the text "New Shipment". The main content area is a table listing a single shipment entry. The columns are labeled "ID", "Type", "Reference", "Total Items", "Products", "Warehouse", and "Date". The data row shows: ID 4, Type IN, Reference -, Total Items 1, Products Box (Small), Warehouse Main Warehouse, and Date 2025-11-05 01:02:31.

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

New shipment screen:



The screenshot shows the "Create New Shipment" form. At the top left is a purple plus icon followed by the text "Create New Shipment". The form consists of several input fields and dropdown menus:

- Shipment Type:** A dropdown menu showing "IN".
- Warehouse:** A dropdown menu showing "-- Select Warehouse or Add New --".
- Product:** A dropdown menu showing "-- Select Product or Add New --".
- Quantity:** An input field with placeholder text "Enter quantity".
- Reference:** An input field with placeholder text "Optional reference".

At the bottom of the form are two buttons: a blue "Create" button with a small icon and a grey "Cancel" button.