

Database:

```
CREATE DATABASE IF NOT EXISTS inventory_db;  
USE inventory_db;
```

```
CREATE TABLE Roles (  
    RoleID INT AUTO_INCREMENT PRIMARY KEY,  
    RoleName VARCHAR(50)  
);
```

```
CREATE TABLE Users (  
    UserID INT AUTO_INCREMENT PRIMARY KEY,  
    Username VARCHAR(100) UNIQUE,  
    Password VARCHAR(255),  
    RoleID INT,  
    FOREIGN KEY (RoleID) REFERENCES Roles(RoleID)  
);
```

```
CREATE TABLE Products (  
    ProductID INT AUTO_INCREMENT PRIMARY KEY,  
    Name VARCHAR(100),  
    Category VARCHAR(50),  
    Price DECIMAL(10,2)  
);
```

```
CREATE TABLE Suppliers (  
    SupplierID INT AUTO_INCREMENT PRIMARY KEY,  
    Name VARCHAR(100),  
    ContactInfo VARCHAR(100)  
);
```

```
CREATE TABLE SupplierProducts (  
    SupplierID INT,  
    ProductID INT,  
    PRIMARY KEY (SupplierID, ProductID),  
    FOREIGN KEY (SupplierID) REFERENCES Suppliers(SupplierID),  
    FOREIGN KEY (ProductID) REFERENCES Products(ProductID)  
);
```

```
CREATE TABLE Stock (  
    StockID INT AUTO_INCREMENT PRIMARY KEY,  
    ProductID INT,  
    SupplierID INT,  
    QuantityAdded INT,  
    DateAdded DATE,
```

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        FOREIGN KEY (ProductID) REFERENCES Products(ProductID),
        FOREIGN KEY (SupplierID) REFERENCES Suppliers(SupplierID)
    );

```

```

CREATE TABLE Sales (
    SaleID INT AUTO_INCREMENT PRIMARY KEY,
    ProductID INT,
    QuantitySold INT,
    SaleDate DATE,
    TotalAmount DECIMAL(10,2),
    FOREIGN KEY (ProductID) REFERENCES Products(ProductID)
);

```

Code:

```

<?php
// config.php
$mysqli = new mysqli("localhost", "root", "", "inventory_db");
if ($mysqli->connect_error) {
    die("Connection failed: " . $mysqli->connect_error);
}
?>

```

<!-- login.php -->

```

<?php
session_start();
include 'config.php';

```

```

if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $username = $_POST['username'];
    $password = $_POST['password'];

```

```

    $stmt = $mysqli->prepare("SELECT UserID, Password, RoleID FROM Users WHERE
Username = ?");
    $stmt->bind_param("s", $username);
    $stmt->execute();
    $stmt->bind_result($userID, $hashedPassword, $roleID);

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    if ($stmt->fetch() && password_verify($password, $hashedPassword)) {
        $_SESSION['userID'] = $userID;
        $_SESSION['roleID'] = $roleID;
        header("Location: dashboard.php");
    } else {
        echo "Invalid credentials!";
    }
}

```

```

    }
}
?>
<form method="post">
    <input name="username" required placeholder="Username">
    <input name="password" type="password" required placeholder="Password">
    <button type="submit">Login</button>
</form>

<!-- dashboard.php -->
<?php
session_start();
if (!isset($_SESSION['userID'])) {
    header("Location: login.php");
    exit;
}
echo "<h2>Welcome to Inventory System</h2>";
echo "<a href='add_product.php'>Add Product</a> | ";
echo "<a href='list_products.php'>View Products</a> | ";
echo "<a href='logout.php'>Logout</a>";
?>

<!-- add_product.php -->
<?php
include 'config.php';
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $name = $_POST['name'];
    $category = $_POST['category'];
    $price = $_POST['price'];

    $stmt = $mysqli->prepare("INSERT INTO Products (Name, Category, Price) VALUES (?, ?,
?);");
    $stmt->bind_param("ssd", $name, $category, $price);
    $stmt->execute();
    echo "Product added!";
}
?>
<form method="post">
    <input name="name" placeholder="Product Name" required><br>
    <input name="category" placeholder="Category" required><br>
    <input name="price" placeholder="Price" required type="number" step="0.01"><br>
    <button type="submit">Add</button>
</form>

```

```

<!-- list_products.php -->
<?php
include 'config.php';
$result = $mysqli->query("SELECT * FROM Products");

echo "<h2>Product List</h2>";
while ($row = $result->fetch_assoc()) {
    echo "ID: {$row['ProductID']} - {$row['Name']} | P{$row['Price']} | {$row['Category']}<br>";
}
?>

<!-- logout.php -->
<?php
session_start();
session_destroy();
header("Location: login.php");
?>

<!-- create_admin.php -->
<?php
include 'config.php';

// Add roles
$mysqli->query("INSERT IGNORE INTO Roles (RoleID, RoleName) VALUES (1, 'Admin'), (2, 'Staff')");

// Create admin
$username = "admin";
$password = password_hash("admin123", PASSWORD_DEFAULT);
$roleID = 1;

$stmt = $mysqli->prepare("INSERT IGNORE INTO Users (Username, Password, RoleID)
VALUES (?, ?, ?)");
$stmt->bind_param("ssi", $username, $password, $roleID);
$stmt->execute();

echo "Admin created.";
?>

```