Problem 3

Security Feature	Description	Action	Expected Result
Role-Based Access Control (RBAC)	Ensure unauthorized roles cannot access Admin pages	Login as Salesperson and go to ManageUsers.aspx	User should be redirected to Logout.aspx
RBAC	Ensure Admin can access all admin pages	Login as Admin and go to ManageUsers.aspx	Page should load successfully
Input Validation	Prevent non-numeric input in Product ID field	Enter "abc" in Product ID on AddProduct.aspx	Error message: "Please enter valid numeric values."
Input Validation	Check for empty product name	Leave Product Name blank	Error message: "Product name is required."
Server-Side Access Control	Try direct URL access without login	Enter URL of AddProduct.aspx without logging in	Redirected to Login.aspx
Parameterized Queries	Prevent SQL Injection in Product Name	Enter ' OR 1=1 as Product Name	Treated as string input; no SQL injection occurs
Authentication and Session Mgmt	Ensure session expires on logout	Log in → Logout → Try visiting AddProduct.aspx	Redirected to Login.aspx
Error Handling	Handle duplicate Product ID	Enter an existing Product	Error message: "Product ID already exists."
Postback Control	Prevent dropdowns from clearing after postback	Load AddProduct.aspx, enter invalid input, click Add	Dropdowns remain populated after postback

Security Feature	Description	Action	Expected Result
Authentication	Invalid login credentials	Enter wrong password	Redirected to login with an error message