

Test Case	Purpose	Expected Result	Outcome	Status
User Login (Valid Credentials)	To verify that a user can log in with valid credentials.	User is successfully logged in and redirected to the main page.	The login works correctly, and the user is redirected to the main page upon successful authentication.	PASS
User Login (Invalid Credentials)	To verify that a user cannot log in with incorrect credentials.	The user is shown an error message indicating invalid username or password.	The system prevents login and shows an error message.	PASS
User Logout	To ensure that a logged-in user can log out.	The user is logged out and redirected to the login page.	The user is logged out successfully and redirected to the login page.	PASS
User Session	To verify that the user remains logged in after successfully logging in.	The user should stay logged in and should be able to access the main page without re-authenticating.	The session persists and the user remains logged in until they log out.	PASS
Add Stock Item (Valid Data)	To verify that a stock item can be added with valid input data.	The stock item is added to the database, and the user receives a success message.	The item is added successfully and the success message is shown.	PASS
Add Stock Item (Invalid Stock Code)	To verify that the system prevents adding a stock item with an invalid stock code.	The user is shown an error message indicating that the stock code must be alphanumeric.	The system prevents the addition of the item and displays the error message.	PASS
Add Stock Item (Duplicate Stock Code)	To verify that a stock code cannot be duplicate.	The user is shown an error message indicating that the stock code already exists.	The system prevents the addition of duplicate addition of stock code and displays the error message.	PASS
Add Stock Item (Negative Quantity)	To ensure that a stock item cannot be added with a negative quantity.	The user is shown an error message indicating that quantity cannot be negative.	The system prevents adding the item and displays the error message.	PASS
Add Stock Item (Negative Price)	To ensure that a stock item cannot be added with a negative price.	The user is shown an error message indicating that price cannot be negative.	The system prevents adding the item and displays the error message.	PASS
Add Stock Item (Negative Quantity and Price)	To ensure that a stock item cannot be added with a negative quantity and price at the same time.	The user is shown an error message indicating that both quantity and price cannot be negative at the same time.	The system prevents adding the item and displays the error message.	PASS
Add Stock Item (Exceeds Maximum Quantity)	To verify that a stock item cannot be added if the quantity exceeds the maximum allowed value.	The user is shown an error message indicating that quantity exceeds the maximum allowed.	The system prevents adding the item and displays the error message.	PASS
Update Stock Item (Valid Data)	To verify that a stock item can be updated with valid data.	The stock item is updated in the database, and the user receives a success message.	The stock item is successfully updated, and the success message is displayed.	PASS
Update Stock Item (Negative Quantity)	To ensure that the stock item's quantity cannot be updated to a negative value.	The user is shown an error message indicating that quantity cannot be negative.	The system prevents the update and displays the error message.	PASS

Update Stock Item (Negative Price)	To ensure that the stock item's price cannot be updated to a negative value.	The user is shown an error message indicating that price cannot be negative.	The system prevents the update and displays the error message.	PASS
Update Stock Item (Exceeds Maximum Quantity)	To verify that the stock item's quantity cannot be updated to a value that exceeds the maximum allowed.	The user is shown an error message indicating that quantity exceeds the maximum allowed.	The system prevents the update and displays the error message.	PASS
View Stock Item (Valid Data)	To verify that the details of a valid stock item can be viewed.	The stock item's details (such as stock code, quantity, price, price with VAT and stock name and description) are displayed.	The stock item's details are correctly displayed on the page.	PASS
VAT Calculation (Price with VAT)	To verify that the system calculates the price including VAT correctly.	The system should return the price with VAT calculated as 17.5% of the original price.	The system calculates and displays the correct price with VAT.	PASS
Add NavSys Item (Valid Data)	To verify that a NavSys item can be added with valid data.	The NavSys item is added successfully, including the brand field, and the user sees a success message.	The NavSys item is added successfully, and the success message is displayed.	PASS
Add NavSys Item (Invalid Stock code)	To verify that the system prevents adding a stock item with an invalid stock code.	The user is shown an error message indicating that the stock code must be alphanumeric.	The system prevents the addition of the item and displays the error message.	PASS
Add NavSys Item (Duplicate Stock code)	To verify that a stock code cannot be duplicate.	The user is shown an error message indicating that the stock code already exists.	The system prevents the addition of duplicate addition of stock code and displays the error message.	PASS
View NavSys Item (Valid Data)	To verify that the details of a valid NavSys item are displayed correctly.	The system displays the correct stock code, quantity, price, price with vat, stock name (Navigation System) and stock description (GeoVision Sat Nav),brand	The NavSys item is correctly displayed with the appropriate name and description.	PASS
NavSys Stock Name	To test the get_stock_name() method in the NavSys subclass.	The method should return "Navigation system" as the stock name.	The method correctly returns "Navigation system."	PASS
NavSys Stock Description	To test the get_stock_description() method in the NavSys subclass.	The method should return "GeoVision Sat Nav" as the stock description.	The method correctly returns "GeoVision Sat Nav."	PASS
Add Item (SQL Injection Attempt)	To verify that the system is protected against SQL injection attacks.	The system should reject any input with SQL injection characters and display a proper error message.	The system successfully blocks SQL injection attempts and does not add malicious data.	PASS
User Permissions (Access Restrictions)	To verify that a non-logged-in user cannot access pages that require authentication.	Non-logged-in users are redirected to the login page when trying to access restricted pages.	The system correctly redirects users who are not logged in to the login page.	PASS