Test Cases

Test Scenario Description	Test Case Description	Test Steps	Pre-Conditions	Expected Result	Test Data	Result
Manager add new product to the system.	Ensure manager can successfully add new electronics product to the system.	1.Access the "Add a new product" menu. 2 .Enter details for a new electronics product.	User must have to app open.	New electronic product I added to the system.	ProductID: E001, Name: Laptop, Quantity: 1, Price: 100000, Brand: Dell, Warranty Period : 1yr	Pass
Manager add new product to the system.	Ensure manager can successfully add new clothing product to the system.	1.Access the "Add a new product" menu. 2 .Enter details for a new clothing product.	User must have to app open.	New clothing product I added to the system.	ProductID: C001, Name: Shirt, Quantity: 1, Price: 2000, Color: Blue, Size: M	Pass
Attempt to add a product with an existing ID	Ensure the system prevents adding a product with an existing product ID	1. Access the "Add New Product" menu. 2. Enter details with an existing product ID.	User must have to app open.	Existing product with the same ID is displayed, and an error message is shown which is "Product ID is already exists.".	Product ID: E001	Pass
Manager attempts to add a new product when the maximum limit of 50 products is reached	Ensure the system prevents adding a new product when the maximum limit is reached	1. Add 50 products to the system. 2. Attempt to add a new product.	System must contain 50 products in the list.	"Maximum numbers of products have been reached." error message is displayed.	Product ID: E002, Name: TV, Quantity: 10, Price: 50000	Pass
Manager deletes an electronics product	Ensure the manager can successfully delete an electronics product	1. Access the "Delete Product" menu. 2. Enter the product ID for an	System must have pre added products.	Existing electronics product is deleted, and system updates the total number	Product ID: E001	Pass

	from the system	existing electronics product.		of products and message is shown "Product has been removed successfully. Remaining products: ".		
Manager deletes an clothing product	Ensure the manager can successfully delete an clothing product from the system	1. Access the "Delete Product" menu. 2. Enter the product ID for an existing clothing product.	System must have pre added products.	Existing clothing product is deleted, and system updates the total number of products and message is shown "Product has been removed successfully. Remaining products: ".	Product ID: C001	Pass
Attempt to delete a non-existing product	Ensure the system prevents deleting a non-existing product	1. Access the "Delete Product" menu. 2. Enter a non-existing product ID.	None	"ProductID does not exists." error message is displayed indicating the product does not exist.	Product ID: NonExistingID	Pass
Manager prints the list of products	Ensure the manager can successfully print the list of all products in the system	1. Access the "Print Products" menu.	System must have pre added products.	List of products is displayed alphabetically based on product ID	None	Pass
Manager saves products to a file	Ensure the manager can successfully save the list of	1. Access the "Save Products" menu.	System must have pre added products.	Products are saved to the file.	None	Pass

	products to a file					
Restart application and load saved products	Ensure the system can read back saved information from the file on application restart	1. Restart the application. 2. Access the "Print Products" menu.	System must have pre added products.	Products from the file are loaded and displayed	None	Pass
User selects to view all products on the GUI	Ensure the user can select "All" from the drop-down menu to view all products	1. Access the GUI. 2. Select "All" from the drop-down menu	None	All products are displayed in the table.	None	Pass
User selects to view electronics products on the GUI	Ensure the user can select "All" from the drop-down menu to view electronics products	1. Access the GUI. 2. Select "Electronics" from the drop-down menu	At least one electronic product is added to the system.	Only electronics products are displayed in the table.	None	Pass
User selects to view Clothing products on the GUI	Ensure the user can select "Clothing" from the drop-down menu to view all products	1. Access the GUI. 2. Select "Clothing" from the drop-down menu	At least one electronic product is added to the system.	Only clothing products are displayed in the table.	None	Pass
User views products on the GUI	Ensure the user can successfully view products on the GUI	1. Access the GUI.	At least one product is added to the system.	Table displays products with reduced availability in red	None	Pass

User selects a product and adds it to the shopping cart	Ensure the user can select a product from the GUI table, view details, and add it to the shopping cart	1. Access the GUI. 2. Select a product from the table. 3. View details and click "Add to Cart" button.	At least one product is added to the system.	Product is added to the shopping cart.	None	Pass
User views the contents of the shopping cart	Ensure the user can view the contents of the shopping cart on the GUI	1. Access the GUI. 2. Click on the "Shopping Cart" button.	At least one product is added to the shopping cart.	Products in the shopping cart are displayed along with the final price.	None	Pass
Apply discounts in the shopping cart	Ensure the system applies discounts to the final price in the shopping cart	1. Access the GUI. 2. Add products to the shopping cart to qualify for discounts	User must select at least 3 product on same product.	Final price in the shopping cart reflects applied discounts.	None	Pass
System calculates final price and displays discount message	Ensure the system accurately calculates the final price and displays a message indicating applied discounts	1. Access the GUI. 2. Add products to the shopping cart.	User must select at least 3 product on same product.	Final price reflects applied discounts, and a message is displayed.	None	Pass
System tracks and applies	Ensure the system keeps track	1. Access the GUI. 2. Make the	Client makes	Final price in the shopping cart reflects a	None	Pass

first purchase discount	of client purchase history and applies a 10% discount for the very first purchase	first purchase.	the first purchase	10% discount, and a message is displayed		