

Test Scenario Description	Test Case ID	Test Case Description	Precondition	Expected Result	Test Data	Status
Check that adding a product to the system works as intended.	Tc -1	The user provides accurate inputs	Selected option 1 in the menu	Add the product successfully.	Valid inputs (product_id,product_name, integers,doubles), addProductToSystem()	Pass
Check that adding a product to the system works as intended.	Tc -2	The user will enter a valid data input, but the limit (50) has been reached	Selected option 1 in the menu	Print “Maximum limit reached. Cannot add the product!”	Size of the productlist, addProductToSystem()	Pass
Check that adding a product to the system works as intended.	Tc -3	The user will enter Electronics/Clothing in lowercase	Selected option 1 in the menu	Add the product successfully.	productType, addProductToSystem()	Pass
Check that adding a product to the system works as intended.	Tc -4	The user enters a string value for the integer variables	Selected option 1 in the menu	Print “This is an invalid input. Please enter a valid integer”.	Integer variables	Pass
Check that adding a product to the system works as intended.	Tc -5	The user enters a string value for the double variables	Selected option 1 in the menu	Print “This is an invalid input. Please enter a valid double”.	double variables	Pass
Check that deleting a product from the system	Tc -6	The user enters a valid product_id	Selected option 2 in the menu	Product deleted and deleted product details are printed along with the	Product_id: String	Pass

works as intended.				number of products that are still available.		
Check that deleting a product from the system works as intended.	Tc -7	The user enters an invalid product_id	Selected option 2 in the menu	Ignores the error	Product_id: String	Pass
Check that saving products in a file works as intended.	Tc -8	Check the functionality of the file-generating process.	Selected option 4 in the menu	The file has been created and prints "Successfully saved to file"	saveInFile() method	Pass
Check that saving products in a file works as intended.	Tc -9	Check the functionality of the file-generating process without adding products.	Selected option 4 in the menu	The empty file has been created and prints "Successfully saved to file"	saveInFile() method	Pass
Check that loading products from a file works as intended.	Tc - 10	Check the functionality of the existing file-loading process.	Program started	Successfully loaded	loadFromFile() method	Pass
Check that loading products from a file works as intended.	Tc - 11	Check the functionality of the non-existing file-loading process.	Program started	Error message "...Creating new list..."	loadFromFile() method	Pass
Check that the first-purchase	Tc - 12	Make that the newly added user is no longer new.	Products are added to the cart and opened	After closing the GUI firstPurchase	shoppingGUI constructor & firstPurchase:boolean	Pass

discount is working properly.			the shopping cart GUI	variable is set to false		
Check that the first-purchase discount is working properly.	Tc - 13	A 10% discount is available	The user is qualified for the 10% discount	Display a 10% discount in the shopping cart GUI	calculateDiscount10() method, discountEligible10() method	Pass
Check that the first-purchase discount is working properly.	Tc - 14	A 10% discount is unavailable	The user is not qualified for the 10% discount	Not displaying a 10% discount in the shopping cart GUI	calculateDiscount10() method, discountEligible10() method	Pass
Check that the 20% discount is working properly.	Tc - 15	The cart is added with three or more items from the same category.	Products are added to the cart and opened the shopping cart GUI	Display a 20% discount in the shopping cart GUI	discountEligible() method, calculateDiscount20() method	Pass
Check that the 20% discount is working properly.	Tc - 16	The cart is added less than 3 items from the same category.	Products are added to the cart and opened the shopping cart GUI	Not displaying a 20% discount in the shopping cart GUI	discountEligible() method, calculateDiscount20() method	Pass
Check that the Add to Shopping Cart button working properly.	Tc - 17	Check the functionality after selecting a product from the product list table	Products are added to the system and selected option 5	The product is added to the cart	addProductToCart() method	Pass
Check that the Add to	Tc - 18	Check the functionality	No products are added to the	Pop-up message "Please select a	addToCartBtn action listener	Pass

Shopping Cart button working properly.		without selecting a product from the product list table	system and selected option 5	valid product to add to the cart."		
Users are saved and loaded to/from the file	Tc - 19	Successfully Save Users to the file	User registered successfully	The users are saved to the file, and no exceptions are thrown.	loadRegUserList()	Pass
Users are saved and loaded to/from the file	Tc - 20	When starting the program successfully loads users from the file	The file contains the user's data	The users are loaded into the regUserList, and no exceptions are thrown.	loadRegUserList()	Pass
Check the registration of the user.	Tc - 21	Failed the user registration	The username "existing_user" is already in use by someone else in the system.	The user will not added to the system	handleUserRegistration(), regUserList	Fail
Check the registration of the user.	Tc - 22	The user registration is successful.	There isn't a user in the system with the specified username.	Prints "The user registered successfully. You can now log in to your cart."	handleUserRegistration(), regUserList	Pass
Check the authenticity of the user.	Tc - 23	The user Authentication is successful.	A user with the specified username and password exists in the system.	Opens the shopping GUI	handleUserLogin(), userAuthentication()	Pass

Check the authenticity of the user.	Tc - 24	Failed the User Authentication	A user with the specified username but with a different password exists in the system.	Prints “Sorry! Login failed. Invalid username or password.”	handleUserLogin(), userAuthentication()	Pass
Check the authenticity of the user.	Tc - 25	Failed the User Authentication (user isn't existing)	The system does not contain a user with the specified username.	Prints “Sorry! Login failed. Invalid username or password.”	handleUserLogin(), userAuthentication()	Pass
Check that the GUI's drop-down menu functions properly.	Tc - 26	Filter by "All" Category	The GUI is opened and products are added to the system.	All products are updated in the table.	categorizedProductsList:List<Product>, products2:List<Product>	Pass
Check that the GUI's drop-down menu functions properly.	Tc - 27	Filter by "Electronics" Category	The GUI is opened and products are added to the system.	Electronics products are updated in the table.	categorizedProductsList:List<Product> products2:List<Product>	Pass
Check that the GUI's drop-down menu functions properly.	Tc - 28	Filter by "Clothing" Category	The GUI is opened and products are added to the system.	Clothing products are updated in the table.	categorizedProductsList:List<Product> products2:List<Product>	Pass