953323 Software Construction, Testing and Maintenance

MEOW MEOW ONLINE SHOP
Test Document

Members

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Test Plan

Mock Objects

DB01 Member Entity

UserID	Name	Username	Password	Address	User Image	Type
1	Admin	admin	1234	CNX	null	Admin
2	Parun	parun	1234	Null	null	member

DB02 Product Entity

Product ID	Product Name	Description	Price	Amount	Product Image
1	A	Product one a	400	2	null
2	B	Product two b	200	2	null
3	C	Product three c	200	2	null
4	Cat	That cat	100	1	C:\Users\Alienware\ images\cat1.jpg

DB03 OrderedLog Entity

OrderID	id	date	MemberName	totalPice	orderDate	paymentOption
1	1	1469-11-22 00:00:00.0	Parun	400	16012014	CREDIT_CARD

DB04 Cart Entity

id	No.	productName	price	amount	subTotal
1	1	a	400.00	1	400.00
2	2	b	200.00	1	200.00

Unit Testing

Class visitorController
Unit Test Case 01 (UTC-01): showMemberRegisterPage(Model model)
Description: Test the showMemberRegisterPage(Model model) method to see that it can register and can't redirect to register page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../register and go to register page.	**.../register**	**Pass**
2	This method can't redirect to /register by using a wrong URL: .../regis	**.../regis**	**Fail**

Unit Test Case 02 (UTC-02): login**()**
Description: Test the login() method to see that it can log in and can't redirect to log in page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../login and go to login page.	.../login	Pass
2	This method can't redirect to /login by using a wrong URL: .../LogIn	.../LogIn	Fail

Unit Test Case 03 (UTC-03): addValidMember **()**
Description: Test the addValidMember () method to see that it can redirect to memberfrom page or can't redirect to memberfrom page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../addvalidMember and go to memberfrom page.	.../addvalidMember	Pass
2	This method can't redirect to	.../ addvaildUser	Fail

	/addvalidMember by using a wrong URL: .../addvaildUser		

Unit Test Case 04 (UTC-04): addValidMember ()

Description: Test the addValidMember () method to see that it can redirect to memberfrom page or can't redirect to memberfrom page if using a wrong URL.

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../addvalidMember and go to memberfrom page.	…/addvalidMember	Pass
2	This method can't redirect to /addvalidMember by using a wrong URL: .../addvaildUser	…/ addvaildUser	Fail

Class visitorController

Unit Test Case 06 (UTC-06):
showOrderedLog(@ModelAttribute("userSession") User user, ModelMap model)
Description: Test the showOrderedLog () method to see that it can redirect to orderedLogList page or can't redirect to orderedLogList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ orderedLogList and go to orderedLogList page.	…/ orderedLogList	Pass
2	This method can't redirect to / orderedLogList by using a wrong URL: …/ orderedList	…/ orderedList	Fail

Unit Test Case 07 (UTC-07):
searchOrderedLogByUser(@ModelAttribute("userSession") User user,@PathVariable("keyword")String s,ModelMap model)
Description: Test the s searchOrderedLogByUser () method to see that it can redirect to orderedLogList page or can't redirect to orderedLogList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ searchOrderedLog/{keyword} and go to orderedLogList page.	…/ admin/orderLog	Pass
2	This method can't redirect to / searchOrderedLog/{keyword} by using a wrong URL: …/ search/{keyword}	…/ search/aaaaa	Fail

Unit Test Case 08 (UTC-08): list(Model model)
Description: Test the list () method to see that it can redirect to memberList page or can't redirect to memberList page if using a wrong URL.

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ memberlist and go to memberList page.	.../ memberlist	Pass
2	This method can't redirect to / memberlist by using a wrong URL: .../ Listmember	.../ Listmember	Fail

Unit Test Case 09 (UTC-09): search(Model model)

Description: Test the search () method to see that it can redirect to memberList page or can't redirect to memberList page if using a wrong URL.

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ searchMember and go to memberList page.	.../ searchMember	Pass
2	This method can't redirect to / searchMember by using a wrong URL: .../ Listmember	.../ Listmember	Fail

Unit Test Case 10(UTC-10): search(@PathVariable("keyword") String keyword, Model model)

Description: Test the search () method to see that it can redirect to memberList page or can't redirect to memberList page if using a wrong URL.

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ searchMember/{keyword} and go to memberList page.	.../ searchMember/parun	Pass
2	This method can't redirect to / searchMember/{keyword} by using a wrong URL: .../ searchMembers/{keyword}	.../ searchMembers/ppppp	Fail

Unit Test Case 11(UTC-11): addProduct()
Description: Test the addProduct () method to see that it can redirect to addProduct page or can't redirect to addProduct page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ addProduct and go to addProduct page.	.../ addProduct	Pass
2	This method can't redirect to / addProduct by using a wrong URL: .../ addProducts	.../ addProducts	Fail

Unit Test Case 12(UTC-12): productList ()
Description: Test the productList () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ productlist and go to productlist page.	.../ productlist	Pass
2	This method can't redirect to / productlist by using a wrong URL: .../ productLists	.../ productLists	Fail

Class MemberController

Unit Test Case 13 (UTC-13): getToProfilePage()
Description: Test the userProfile () method to see that it can redirect to userProfile page or can't redirect to userProfile page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ profile and go to userProfile page.	.../ profile	Pass
2	This method can't redirect to / profile by using a wrong URL: .../ profiles	.../ profiles	Fail

Unit Test Case 14 (UTC-14): updateMember ()
Description: Test the updateMember () method to see that it can redirect to memberForm page or can't redirect to memberForm page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ update/{username} and go to memberForm page.	.../ update/parun	Pass
2	This method can't redirect to / update/{username} by using a wrong URL: .../ updates/{username}	.../ updates/Parun	Fail

Unit Test Case 15 (UTC-15): addToCart(@PathVariable("productId") Long id,@ModelAttribute("memberSession") Member member,@RequestParam   ("amount") int amount, ModelMap model)
Description: Test the addToCart () method to see that it can redirect to cart page or can't redirect to cart page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ addToCart/{productId} and go to cart page.	.../ addToCart/1	Pass

2	This method can't redirect to / addToCart/{productId}by using a wrong URL: .../ addToCarts/{productId}	.../ addToCarts/1	Fail

Unit Test Case 16 (UTC-16): showCartPage()

Description: Test the showCartPage () method to see that it can redirect to cart page or can't redirect to cart page if using a wrong URL.

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ showCart and go to cart page.	.../ showCart	Pass
2	This method can't redirect to / showCarts by using a wrong URL: .../ showCarts	.../ showCarts	Fail

Unit Test Case 17 (UTC-17): checkOut ()

Description: Test the checkOut () method to see that it can redirect to checkout page or can't redirect to checkout page if using a wrong URL.

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ checkout and go to cart page.	.../ checkout	Pass
2	This method can't redirect to... / checkout by using a wrong URL: .../ checkouts	.../ checkouts	Fail

Class ProductController

Unit Test Case 18(UTC-18): list ()
Description: Test the list () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ list and go to productList page.	…/ list	Pass
2	This method can't redirect to… / list by using a wrong URL: …/ lists	…/ lists	Fail

Unit Test Case 19 (UTC-19): search ()
Description: Test the search () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ search and go to productList page.	…/ search	Pass
2	This method can't redirect to… / search by using a wrong URL: …/ searchs	…/ searchs	Fail

Unit Test Case 20 (UTC-20): search(@PathVariable("keyword") String keyword, Model model)
Description: Test the search () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ search/{keyword} and go to productList page.	…/ search/A	Pass
2	This method can't redirect to… /	…/ searchs/AAA	Fail

	search/{keyword} by using a wrong URL: .../ searchs/{keyword}		

Class MemberServiceImpl

Unit Test Case 21 (UTC-21): getMembers()

Description: Test the getMembers() method to see that it can show the list of member from the member database on the web application

Test Cases

ID	Description	Input	Expected Result
1	This method get list of members	.../memberlist	Display the list of members

Unit Test Case 22 (UTC-22): findById(String username)

Description: Test the findById(String username) method to see that the system can get the member's information by their username.

Test Cases

ID	Description	Input	Expected Result
1	This method can get the member's information by username.	parun	Show member information that has "parun" as a username.
2	This method cannot get the member's information because this username is not exists.	chalee	Show message "No result"

Unit Test Case 23 (UTC-23): searchMember(String keyword)

Description: Test the searchMember(String keyword)method to see that the system can get list of members by inputting keyword.

Test Cases

ID	Description	Input	Expected Result
1	This method can get the list of members by keyword.	P	Show list of members that has letter "P" :parun
2	This method cannot get the information because it does not exist.	Z	Show message "No result"

Class ProductInCartServiceImpl

Unit Test Case 24 (UTC-24): addProductInCart (ProductInCart productInCart)

Description: Test the addProductInCart (ProductInCart productInCart) method to see that the system can add product in shopping cart.

Test Cases

ID	Description	Input	Expected Result
1	This method can add product into the shopping cart.	Add command	Show added product in shopping cart.

Unit Test Case 25 (UTC-25): deleteProductInCart(ProductInCart productInCart)

Description: Test the deleteProductInCart(ProductInCart productInCart) method to see that the system can delete product from the shopping cart.

Test Cases

ID	Description	Input	Expected Result
1	This method can delete product from the shopping cart.	Delete command	Remove the deleted product from the shopping cart.

Unit Test Case 26 (UTC-26): getProductInCarts()

Description: Test the getProductInCarts()method to see that it can get all products from the shopping cart database to show on the web application.

Test Cases

ID	Description	Input	Expected Result
1	This method get list of products in the shopping cart	…/showCart	Show list of products in the shopping cart.

Class ProductServiceImpl

Unit Test Case 27 (UTC-27): addProduct(Product product)
Description: Test the addProduct(Product product) method to see that product can be added in the system.
Test Cases

ID	Description	Input	Expected Result
1	This method can add product in the system	Product id, product name, product detail, price, picture, category	The product is added in product database.

Unit Test Case 28 (UTC-28): getProduct()
Description: Test the getProduct() method to see that it can get all products from product database to show on the web application.
Test Cases

ID	Description	Input	Expected Result
1	This method can get list of products from product database	…/list	Show list of products

Unit Test Case 29 (UTC-29): searchProducts(String keyword)
Description: Test the searchProducts(String keyword) method to see that the system can get list of products by inputting keyword.
Test Cases

ID	Description	Input	Expected Result
1	This method can get the list of products by keyword.	A	Show list of members that has letter "A"
2	This method cannot get the information because it does not exist.	O	Show message "No result"

Class OrderLogServiceImpl

Unit Test Case 30(UTC-30): searchByUser(String keyword)
Description: Test the searchByUser(String keyword)method to see that the system can get list of products that has been ordered by the certain member.
Test Cases

ID	Description	Input	Expected Result
1	This method can get the list of product that ordered by the certain member.	parun	Show the product the member name "parun" has ordered.
2	This method cannot get the information because it does not exist.	xxx	Show message "No result"

Unit Test Case 31(UTC-31): searchByDate(Date date)
Description: Test the searchByDate(Date date) method to see that the system can get list of products that has been ordered on the certain date.
Test Cases

ID	Description	Input	Expected Result
1	This method can get the list of product that ordered on the certain date.	16012014	Show list of ordered products.
2	This method cannot get the information because there is no order for this date.	16111995	Show message "No result"
3	This method cannot get the information because it is in wrong format.	1234567890	Show message "Please input in date format"

Integration Testing

1. Introduction

1.1. Purpose

The purpose of the integration test plan is to describe the necessary tests to verify that all of the components of the MVC web application are properly assembled. Integration testing ensures that the unit-tested modules interact correctly.

1.2. Definitions, Acronyms, and Abbreviations

- *JSP* - JavaServer Pages (JSP) technology provides a simplified, fast way to create dynamic web content. JSP technology enables rapid development of web-based applications that are server and platform independent.

- *Servlets* - Java Servlet technology provides Web developers with a simple, consistent mechanism for extending the functionality of a Web server and for accessing existing business systems.

- *JavaBeans* - Components (JavaBeans) are reusable software programs that you can develop and assemble easily to create sophisticated applications.

- *XML* – Extensible Markup Language (XML) is a general purpose markup language that is used to structure data.

- *URL* – A uniform resource locator (URL) is a unique address for locating a file.

- MVC – Model-view-controller (MVC) is an architectural pattern used in software engineering. Successful use of the pattern isolates business logic from user interface considerations, resulting in an application where it is easier to modify either the visual appearance of the application or the underlying business rules without affecting the other.

1.3. Test Strategy

Top-Down testing

This is where the highest level components are tested first and then step by step start working downwards (lower components). Top-down testing mainly requires for the testing team to separate what is important and what is least important, then the most important modules are worked on first. The top-down approach is similar to a binary tree you would start off by integrating the top level before slowly working your way down the tree and integrating all the components at that level.

The advantage to this way of testing is that if a prototype is released or shown then most of the main functionality will already be working. It is also easy to maintain the code and there will be better control in terms of errors so most of the errors would be taken out before going to the next stage of testing.

The disadvantage is that it is hard to test the lower level components using test data. The other thing is that lower level modules may not be tested as much as the upper level modules.

2. Integration Tests

1.4. Data Entities

Package : catShop.entity

- *Cart.java*
- *Image.java*
- *Member.java*
- *OrderedLog.java*
- *PaymentMethod.java*
- **Product.java**
- **ProductInCart.java**
- **User.java**

1.5. Integration Test Plan

1.1.1. Integration test case IT-01 : Index Interface

IT-01UC-01: addUser(User user) : Boolean

Description: This test case is used for adding a new user to the database via hibernate query. The parameters for this method are User object, which consists of {String username, String password and Blob image}.

IT-01UC-01: showMemberRegisterPage(Model model)
Description: Test the showMemberRegisterPage(Model model) method to see that it can register and can't redirect to register page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../register and go to register page.	.../register	Pass
2	This method can't redirect to /register by using a wrong URL: .../regis	.../regis	Fail

IT-01UC-02: login()

Description: This test case is used for getting User object by verifies

username and password via hibernate query.

Description: Test the login() method to see that it can log in and can't redirect to log in page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../login and go to login page.	.../login	Pass
2	This method can't redirect to /login by using a wrong URL: .../LogIn	.../LogIn	Fail

IT-01UC-12: productList ()
Description: Test the productList () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ productlist and go to productlist page.	.../ productlist	Pass
2	This method can't redirect to / productlist by using a wrong URL: .../ productLists	.../ productLists	Fail

1.1.2. Integration test case IT-02 : Home Interface

IT-02UC-13: getToProfilePage()
Description: Test the userProfile () method to see that it can redirect to userProfile page or can't redirect to userProfile page if using a wrong URL.

Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ profile and go to userProfile page.	.../ profile	Pass
2	This method can't redirect to / profile by using a wrong URL: .../ profiles	.../ profiles	Fail

IT-02UC-15: addToCart(@PathVariable("productId") Long id,@ModelAttribute("memberSession") Member member,@RequestParam ("amount") int amount, ModelMap model)
Description: Test the addToCart () method to see that it can redirect to cart page or can't redirect to cart page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ addToCart/{productId} and go to cart page.	.../ addToCart/1	Pass
2	This method can't redirect to / addToCart/{productId}by using a wrong URL: .../ addToCarts/{productId}	.../ addToCarts/1	Fail

IT-02UC-16: showCartPage()
Description: Test the showCartPage () method to see that it can redirect to cart page or can't redirect to cart page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to .../ showCart and go to cart page.	.../ showCart	Pass
2	This method can't redirect to / showCarts by using a wrong URL: .../ showCarts	.../ showCarts	Fail

IT-02UC-17: checkOut ()
Description: Test the checkOut () method to see that it can redirect to checkout page or can't redirect to checkout page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ checkout and go to cart page.	…/ checkout	Pass
2	This method can't redirect to… / checkout by using a wrong URL: …/ checkouts	…/ checkouts	Fail

1.1.3. Integration test case IT-03 : Product Interface

IT-18UC-18: list ()
Description: Test the list () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ list and go to productList page.	…/ list	Pass
2	This method can't redirect to… / list by using a wrong URL: …/ lists	…/ lists	Fail

IT-03UC-19: search ()
Description: Test the search () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ search and go to	…/ search	Pass

	productList page.		
2	This method can't redirect to… / search by using a wrong URL: …/ searchs	…/ searchs	Fail

IT-03UC-20: search(@PathVariable("keyword") String keyword, Model model)
Description: Test the search () method to see that it can redirect to productList page or can't redirect to productList page if using a wrong URL.
Test Cases

ID	Description	Input	Expected Result
1	This method can redirect to …/ search/{keyword} and go to productList page.	…/ search/A	Pass
2	This method can't redirect to… / search/{keyword} by using a wrong URL: …/ searchs/{keyword}	…/ searchs/AAA	Fail

System Testing

System Test Case (STC-01): Visitor shall register as a user to access the web application.

Description: This test case is a system testing for URS-01, if the visitor wants to log in, he/she has to register to be a member first.

Prerequisite:

-The visitor enters the web-application.

-The visitor goes to registration page.

Test Script:

1. The visitor input his/her username, password, name, address, and picture.
2. The visitor clicks done button.
3. The system will save the information into the database.
4. The system displays a successful message.
5. The system goes back to the log in page.

Test Case:

ID	Description	Input	Expect Result
1	Input all required field in the registration form with the correct information.	Username = Noah Password = 1234 Name = Noah Address = Thailand Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	The user information adds to database and the system will redirects to home page.
2	Input some required field in the registration form with correct information.	Username = null Password = 1234 Name = Noah Address = Thailand Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	Show alert message and the system will allow the user to input their information again.

System Test Case (STC-02): Visitor shall view all of products in the web application.

Description: This test case is a system testing for URS-02, if the visitor can take a look at the overall web application.

Prerequisite:

- The visitor enters the web-application.

Test Script:

1) The visitor enters the first page of the site.
2) The system provides the list of all products that exist in the database.

Test Case:

ID	Description	Input	Expect Result
1	The system redirect to the home page.	-	The system shows list of products that exist in the database.

System Test Case (STC-03): Member shall log in to access the web application.

Description: This test case is a system testing for URS-03. Once the visitor has logged in, he/she will be able to access the web application and order products. Otherwise, he/she will only be able to view the products. After the log in process is success, the system will display Home page.

Prerequisite:

- The system is already has the username and password for member in the database.

Test Script:

1.Admin inputs their username and password.

2.Admin clicks login button.

3.The system will verify with database.

4.The system allows the admin access to index page.

Test Case:

ID	Description	Input	Expect Result
1	Input valid username and password.	Username = parun Password = 1234	The system goes to home page
2	Input some fields.	Username = null Password = 1234	Alert message, please input username or password.
3	Input incorrect username and password.	Username = Noahsss Password = 4321	Alert message, Invalid username or password.
4	Not enter both username and password	Username = null Password = null	Alert message, please input username or password.

System Test Case (STC-04): Member shall search product by keyword.
Description: This test case is a system testing for URS-04, the member can search the products by keywords.
 Prerequisite:
- Member has already logged in.
Test Script:
1) The member enters the first page of the site.
2) The system provides a search box.
3) The member input some keywords.
4) The system provides list of products that contains the keyword and exist in the database.

Test Case:

ID	Description	Input	Expect Result
1	Input keywords in the search	Cat	Show list of all

ID	Description	Input	Expect Result
	box		exist products that are cat.
2	Input meaningless keywords in the search box.	*5&@~	Alert message, the result is not found.

System Test Case (STC-05): Member shall view all products in the web application.

Description: This test case is a system testing for URS-05, if the member wants to see all products that exist in the database.

Prerequisite:

- The member has logged in.

Test Script:

1) The member enters the first page of the site.
2) The system provides the list of all products that exist in the database.

Test Case:

ID	Description	Input	Expect Result
	The system redirect to the home page.	-	The system shows list of products that exist in the database.

System Test Case (STC-06): Admin shall view all customers' shopping history.

Description: This test case is a system testing for URS-16, the admin is able to view all the shopping history of the customers.

Prerequisite:

- Admin has already logged in.

Test Script:

1) The admin enters to the shopping history page.
2) The system provides the list of shopping history for each customer.

Test Case:

ID	Description	Input	Expect Result
1	Click view customers' shopping history	-	Show list of customer's shopping history.

System Test Case (STC-07): Member shall view his/her profile.
Description: This test case is a system testing for URS The member can see his/her information once he/she had registered.
 Prerequisite:
-Member already login.
Test Script:
1) The member enters to the profile page.
2) The system provides the information of the member from the member database.

Test Case:

ID	Description	Input	Expect Result
1	Click view profile	-	Show all information of the member, consists of username, name, address and picture.

System Test Case (STC-08): Member shall add product to shopping cart.
Description: This test case is a system testing for URS-08 The member shall add his/her favorite thing to the shopping cart
 Prerequisite:
-Member already login.
-Member has selected at least one item.
Test Script:
1) The member clicks add on the product.
2) The system displays the added product information on the shopping cart page.

Test Case:

ID	Description	Input	Expect Result
1	Click add on the product	Add command	The added product details appear on the shopping cart page.

System Test Case (STC-09): Member shall delete product from shopping cart.

Description: This test case is a system testing for URS-09 The member shall delete his/her things from the shopping cart.

 Prerequisite:

- Member already login.
- Member has added product to shopping cart.

Test Script:

1) The member enters to the shopping cart page.
2) The system displays the added product information on the shopping cart page.
3) The member selects the desire item.
4) The member deletes the selected item.
5) The system deletes the selected item from the shopping cart database.

Test Case:

ID	Description	Input	Expect Result
1	Click delete on the selected item	Delete command	The deleted item is removed from the database and the shopping cart page.

System Test Case (STC-10): Member shall view shopping cart.
Description: This test case is a system testing for URS-10 The member shall view his/her items from the shopping cart.

 Prerequisite:

- Member has already logged in.
- Member has selected some products into the shopping cart.

Test Script:
1) The member enters to the shopping cart page.
2) The system provides the list of all products and details that exist in the shopping cart database.

Test Case:

ID	Description	Input	Expect Result
1	Click view	-	Show all information from the shopping cart database on the shopping cart page.

System Test Case (STC-11): Member shall search his/her shopping history.

Description: This test case is a system testing for URS-11; the member is able to search the shopping history.

Prerequisite:

-Member already login.

- Member stays on shopping cart page.

Test Script:
1. The member click on history link on menu bar.
2. The system will show his/her shopping history.

Test Case:

ID	Description	Input	Expect Result
1	Click on history link and the system will show: - product's name - price of product - Image of product.	-	The system shows list of history that have in database, that consist of - product's name - price of product - Image of product.

System Test Case (STC-12): Member shall check out from the shopping process.

.**Description**: This test case is a system testing for URS-12; the member is able to check out from the shopping process.

Prerequisite:

-Member already login.

- Member has ordered something.

Test Script:
1. The member clicks the check out link.
2. The system displays the summary and the total price of what the member has shopped.
3. The system display the transaction methods.

Test Case:

ID	Description	Input	Expect Result
1	Clicks on the check out link.	-	The system shows summary, total price and display transaction method.

System Test Case (STC-13): Member shall select transaction method.

.**Description**: This test case is a system testing for URS-13; the member is able to select the payment method after finished shopping**.**

 Prerequisite:

-Member already login.

- Member has checked out from the shopping process.

Test Script:
1. The member clicks the transactional link.
2. The system displays various options for the member to choose.
3. The member chooses the options that want to transactional.
4. The system record.

Test Case:

ID	Description	Input	Expect Result
1	The member already chooses the options	-	The system will shows success message

System Test Case (STC-14): Admin shall log in to access the web application.

.**Description**: This test case is a system testing for URS-14 Once the visitor has logged in, he/she will be able to access the web application and order products. Otherwise, he/she will only be able to view the products. After the log in process is success, the system will display Home page.

Prerequisite:

- The system is already has the username and password for member in the database.

Test Script:

1. Admin inputs their username and password.

2. Admin clicks login button.

3. The system will verify with database.

4. The system allows the admin access to index page.

Test Case:

ID	Description	Input	Expect Result
1	Input valid username and password.	Username: admin Password: 1234	Redirect to home page
2	Input some fields.	username = null password = 1234	Alert message, Invalid username or password.
3	Input correct username and password.	username = adminsss password = admin	Redirect to index.jsp
4	Not enter both username and password	username = null password = null	Alert message, can't access to index page.

System Test Case (STC-15): Admin shall search history.

Description: This test case is a system testing for URS-15; the admin is able to search the shopping history of member.

Prerequisite:

-Admin already login.

Test Script:

ID	Description	Input	Expect Result
1	Input invalid userID.	userID: 00000	Alert message, Invalid userID.
2	Input valid userID.	userID:M1234	The his/her history show on history page.

System Test Case (STC-16): Admin shall view all customers' shopping history.

Description: This test case is a system testing for URS-16 The admin is able to view all the shopping history of the customers.

Prerequisite:

-Admin already login.

-Admin stays on history page.

Test Script:

1. The admin input member's id on search box.
2. The system displays history of member.

Test Case:

ID	Description	Input	Expect Result
1	Click on click history link and the system will show: -userID -userName - product's name - price of product - Image of product.	-	The system redirects to history page and shows list of history that have in database, that consist of -userID -userName - product's name - price of product - Image of product.

System Test Case (STC-17): Admin shall view all list of member.
Description: This test case is a system testing for URS-17The admin is able to view all list of member.
 Prerequisite:
-Admin already login.
Test Script:
      1. The customer clicks view member link.
      2. The system displays the list of member.

Test Case:

ID	Description	Input	Expect Result
1	Click on click member link and the system will show: -Member ID -Member's Name - Image of member. -Address of member.	-	The system shows list of member that have in database, that consist of -Member ID -Member's Name - Image of member. -Address of member.

System Test Case (STC-18): Admin shall search member.
Description: This test case is a system testing for URS-18 The admin is able to search the member.
 Prerequisite:
-Admin already login.
Test Script:
      1. The admin input member's id on search box.
      2. The system displays the member.

Test Case:

ID	Description	Input	Expect Result
1	Input invalid userID.	userID: 000000	Alert message, Invalid userID.
2	Input valid userID.	userID:M1234	The his/her history show on history page.

System Test Case (STC-19): Admin shall search customer.

Description: This test case is a system testing for URS-18; the admin is able to search the customers.

 Prerequisite:

-Admin already login.

Test Script:

1. The admin input member's id on search box.
2. The system displays the member.

Test Case:

ID	Description	Input	Expect Result
1	Input invalid userID.	userID: 000000	Alert message, Invalid userID.
2	Input valid userID.	userID:M1234	The his/her history show on history page.

System Test Case (STC-20): Admin shall view all products.

Description: This test case is a system testing for URS-19; the admin is able to view all the products.

 Prerequisite:

-Admin already login.

-Admin stays on product page.

Test Script:

1. The admin click product link.
2. The system displays the list products of the web application.

Test Case:

ID	Description	Input	Expect Result
1	Click on click product link and the system will show: -Product ID -Product's Name - Image of product. -price of product.	-	The system shows list of product that have in database, that consist of -Product ID -Product's Name

			- Image of product. -price of product.

System Test Case (STC-21): Admin shall add products.
Description: This test case is a system testing for URS-20; the admin shall add products to the web-application.
 Prerequisite:
-Admin already login.
Test Script:
1. The admin clicks add product link
2. The system provides the interface for the admin to input the information.
3. The admin input information.
4. The admin clicks save.
5. The system adds the information to the database.

Test Case:

ID	Description	Input	Expect Result
1	Input all required field in add product detail form with all correct information.	Name:toey Description:it is Thai cat. Price:25 Amount:1 Picture:	The system will shows success message and add new product to database.
2	Input all required field in add product detail form with all incorrect information.	Name:4535 Description:it is Thai cat. Price:cat Amount:cat Picture:	The system will shows alert message and a new product does not added to database.
3	Input some required field in add product detail form.	NameNull Description:it is Thai cat. Price:25 Amount:1 Picture:	The system will shows alert message and a new product does not added to database.

Acceptance Testing

Acceptance test case UAT- 01: Visitor shall register as a user to access the web application.

Test Objective	Visitor must able to register for access the web.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	6. The visitor input his/her username, password, name, address, and picture. 7. The visitor clicks done button. 8. The system will save the information into the database. 9. The system displays a successful message. 10. The system goes back to the log in page.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/F
1	Input all required field in the registration form with the correct information.	Username = Noah Password = 1234 Name = Noah Address = Thailand Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	The user information adds to database and the system will redirects to home page.		
2	Input some required field in the registration form with correct information.	Username = null Password = 1234 Name = Noah Address = Thailand Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	Show alert message and the system will allow the user to input their information again.		

Acceptance test case UAT- 02: Visitor shall view all of products in the web application.

Test Objective	Visitor must able to view all of products in the web application.
Tested by	Nahathai Kaewtatib

Tested date	03/01/2014
Procedure step	3) The visitor enters the first page of the site. 4) The system provides the list of all products that exist in the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	The system redirect to the home page.	-	The system shows list of products that exist in the database.		

Acceptance test case UAT- 03: Member shall log in to access the web application.

Test Objective	Member must able to log in to access the web application.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5. Admin inputs their username and password. 6. Admin clicks login button. 7. The system will verify with database. 8. The system allows the admin access to index page.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Input valid username and password.	Username = parun Password = 1234	The system goes to home page		
2	Input some fields.	Username = null Password = 1234	Alert message, please input username or password.		
3	Input incorrect username and password.	Username = Noahsss Password = 4321	Username = Noahsss Password = 4321		
4	Not enter both	Username = null Password =	Alert message, please input		

	username and password	null		username or password.		

Acceptance test case UAT- 04: Member shall search product by keyword.

Test Objective	Member must able to search product by keyword.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5) The member enters the first page of the site. 6) The system provides a search box. 7) The member input some keywords. 8) The system provides list of products that contains the keyword and exist in the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/
1	Input keywords in the search box	Cat	Show list of all exist products that are cat.		
2	Input meaningless keywords in the search box.	*5&@~	Alert message, the result is not found.		

Acceptance test case UAT- 05: Member shall view all products in the web application.

Test Objective	Member must able to view all products in the web application.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3) The member enters the first page of the site. 4) The system provides the list of all products that exist in the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/
1	The system	-	The system shows list of		

redirect to the home page.		products that exist in the database.		

Acceptance test case UAT- 06: Admin shall view all customers' shopping history.

Test Objective	Admin must able to view all customers' shopping history.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3) The admin enters to the shopping history page. 4) The system provides the list of shopping history for each customer.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click view customers' shopping history	-	Show list of customer's shopping history.		

Acceptance test case UAT- 07: Member shall view his/her profile.

Test Objective	Member must able to view his/her profile.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3) The member enters to the profile page. 4) The system provides the information of the member from the member database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click view profile	-	Show all information of the member, consists of username, name, address and picture.		

Acceptance test case UAT- 08: Member shall add product to shopping cart.

Test Objective	Member must able to add product to shopping cart.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3) The member clicks add on the product. 4) The system displays the added product information on the shopping cart pa

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click add on the product	Add command	The added product details appear on the shopping cart page.		

Acceptance test case UAT- 09: Member shall delete product from shopping cart.

Test Objective	Member must able to delete product from shopping cart.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	6) The member enters to the shopping cart page. 7) The system displays the added product information on the shopping cart pa 8) The member selects the desire item. 9) The member deletes the selected item. 10) The system deletes the selected item from the shopping cart database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click delete on the selected item	Delete command	The deleted item is removed from the database and the shopping cart page.		

Acceptance test case UAT- 10: Member shall view shopping cart.

Test Objective	Member must able to view shopping cart.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014

Procedure step	3) The member enters to the shopping cart page. 4) The system provides the list of all products and details that exist in the shopping cart database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click view	-	Show all information from the shopping cart database on the shopping cart page.		

Acceptance test case UAT- 11: Member shall search his/her shopping history.

Test Objective	Member must able to search his/her shopping history.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3. The member click on history link on menu bar. 4. The system will show his/her shopping history.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click on history link and the system will show: - product's name - price of product - Image of product.	-	The system shows list of history that have in database, that consist of - product's name - price of product - Image of product.		

Acceptance test case UAT- 12: Member shall check out from the shopping.

Test Objective	Member must able to check out from the shopping.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	4. The member clicks the check out link. 5. The system displays the summary and the total price of what the membe has shopped. 6. The system displays the transaction methods.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Clicks on the check out link..	-	The system shows summary, total price and display transaction method.		

Acceptance test case UAT- 13: Member shall select transaction method.

Test Objective	Member must able to select transaction method.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5. The member clicks the transactional link. 6. The system displays various options for the member to choose. 7. The member chooses the options that want to transactional. 8. The system record.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	The member already chooses the options	-	The system will shows success message		

Acceptance test case UAT- 14: Member shall select transaction method.

Test Objective	Admin shall log in to access the web application
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	1. Admin inputs their username and password. 2. Admin clicks login button. 3. The system will verify with database. 4. The system allows the admin to access to index page.

Result:

Description	Input	Expect Output	Actual Output	Pass/Fail
Input valid username and password	Username: admin Password: 1234	Redirect to home page		
Input some fields	Username: null Password: 1234	Alert message invalid username or password		
Input incorrect username and password	Username: adminsss Password: admin	Redirect to index.jsp		
Not enter both username and password	Username: null Password: null	Alert message, can't access to home page.		

Acceptance test case UAT- 15: Admin shall search history.

Test Objective	Admin must able to Admin shall search history.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3. The admin input member's id on search box. 4. The system displays history of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/
1	Input invalid userID.	userID: 0000	Alert message, Invalid userID.		
2	Input valid userID.	userID: M1234	The his/her history show on history page.		

Acceptance test case UAT- 16: Admin shall view all customers' shopping

Test Objective	Admin must able to view all customers' shopping
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	1. The admin input member's id on search box. 2. The system displays history of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/
1	Click on click history link and the system will show: -userID -userName - product's name - price of product - Image of product.	-	The system redirects to history page and shows list of history that have in database, that consist of -userID -userName - product's name - price of product - Image of product.		

Acceptance test case UAT- 17: Admin shall view all list of member.

Test Objective	Admin must able to view all list of member.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	1. The admin click member link. 2. The system displays list of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click on click member link and the system will show: -Member ID -Member's Name - Image of member. -Address of member.	-	The system shows list of member that have in database, that consist of -Member ID -Member's Name - Image of member. -Address of member.		

Acceptance test case UAT- 18: Admin shall search member.

Test Objective	Admin must able to view all list of member.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	1. The admin input keyword on search box. 2. The system displays list of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Input invalid userID.	userID: 000000	Alert message, Invalid userID.		
2	Input valid userID.	userID:M1234	The his/her history show on history page.		

Acceptance test case UAT- 19: Admin shall view all products.

Test Objective	Admin must able to view all products.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3. The admin click product link. 4. The system displays the list products of the web application.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I

1	Click on click product link and the system will show: -Product ID -Product's Name - Image of product. -price of product.	-	The system shows list of product that have in database, that consist of -Product ID -Product's Name - Image of product. -price of product.		

Acceptance test case UAT- 20: Admin shall add products.

Test Objective	Admin must able to add products.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	6. The admin clicks add product link 7. The system provides the interface for the admin to input the information. 8. The admin input information. 9. The admin clicks save. 10. The system adds the information to the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/l
1	Input all required field in add product detail form with all correct information.	Name:toey Description:it is Thai cat. Price:25 Amount:1 Picture:	The system will shows success message and add new product to database.		
2	Input all required field in add product detail form with all incorrect information.	Name:4535 Description:it is Thai cat. Price:cat Amount:cat Picture:	The system will shows alert message and a new product does not added to database.		
3	Input some required field in add product detail form.	NameNull Description:it is Thai cat. Price:25 Amount:1 Picture:	The system will shows alert message and a new product does not added to database.		

Test Record

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Unit Testing

Unit Test Case 01 (UTC-01): showMemberRegisterPage(Model model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../register and go to register page.	**.../register**	**Pass**	**Pass**	**Pass**
2	This method can't redirect to /register by using a wrong URL: .../regis	**.../regis**	**Fail**	**Fail**	**Pass**

Unit Test Case 02 (UTC-02): login()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../login and go to login page.	.../login	Pass	Pass	Pass
2	This method can't redirect to /login by using a wrong URL: .../LogIn	.../LogIn	Fail	Fail	Pass

Unit Test Case 03 (UTC-03): addValidMember()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../addvalidMember and go to memberfrom page.	.../addvalidMember	Pass	Pass	Pass
2	This method can't redirect to /addvalidMember by using a wrong URL: .../addvaildUser	.../ addvaildUser	Fail	Fail	Pass

Unit Test Case 06 (UTC-06):

showOrderedLog(@ModelAttribute("userSession") User user, ModelMap model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../orderedLogList and go to orderedLogList page.	.../member/orderedLogList	Pass	Pass	Pass
2	This method can't redirect to /orderedLogList by using a wrong URL: .../orderedList	.../ member/orderedList	Fail	Fail	Pass

Unit Test Case 07 (UTC-07):

searchOrderedLogByUser(@ModelAttribute("userSession") User user,@PathVariable("keyword")String s,ModelMap model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../searchOrderedLog/{keyword} and go to orderedLogList page.	.../member/searchOrderedLog/1	Pass	Pass	Pass
2	This method can't redirect to /searchOrderedLog/{keyword} by using a wrong URL: .../search/{keyword}	.../member/ search/aaa	Fail	Fail	Pass

Unit Test Case 08 (UTC-08):list(Model model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can	.../member/memberlist	Pass	Pass	Pass

	redirect to .../memberlist and go to memberList page.				
2	This method can't redirect to /memberlist by using a wrong URL: .../Listmember	.../ member/Listmember	Fail	Fail	Pass

Unit Test Case 09 (UTC-09):search(Model model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../searchMember and go to memberList page.	.../admin/searchMember	Pass	Pass	Pass
2	This method can't redirect to /searchMember by using a wrong URL: .../Listmember	.../ admin/Listmember	Fail	Fail	Pass

Unit Test Case 10(UTC-10):search(@PathVariable("keyword") String keyword, Model model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../searchMember/{keyword} and go to memberList page.	.../admin/searchMember/A	Pass	Pass	Pass
2	This method can't redirect to /searchMember/{keyword} by using a wrong URL: .../searchMembers/{keyword}	.../ admin/searchMembers/z	Fail	Fail	Pass

Unit Test Case 11(UTC-11):addProduct()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail

1	This method can redirect to .../addProduct and go to addProduct page.	.../admin/addProduct	Pass	Pass	Pass
2	This method can't redirect to /addProduct by using a wrong URL: .../addProducts	.../ admin/addProducts	Fail	Fail	Pass

Unit Test Case 12(UTC-12):productList ()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../productlist and go to productlist page.	.../admin/productlist	Pass	Pass	Pass
2	This method can't redirect to /productlist by using a wrong URL: .../productLists	.../ admin/productLists	Fail	Fail	Pass

Unit Test Case 13 (UTC-13): getToProfilePage()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../profile and go to userProfile page.	.../member/profile	Pass	Pass	Pass
2	This method can't redirect to /profile by using a wrong URL: .../profiles	.../ member/profiles	Fail	Fail	Pass

Unit Test Case 14 (UTC-14): updateMember ()

ID	Description	Input	Expected	Actual Result	Pass/Fail

			Result		
1	This method can redirect to .../update/{username} and go to memberForm page.	.../member/update/A	Pass	Pass	Pass
2	This method can't redirect to /update/{username} by using a wrong URL: .../updates/{username}	.../member/updates/AA	Fail	Fail	Pass

Unit Test Case 15 (UTC-15): addToCart(@PathVariable("productId") Long id,@ModelAttribute("memberSession") Member member,@RequestParam   ("amount") int amount, ModelMap model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../addToCart/{productId} and go to cart page.	.../member/addToCart/1	Pass	Pass	Pass
2	This method can't redirect to /addToCart/{productId}by using a wrong URL: .../addToCarts/{productId}	.../member/addToCarts/20	Fail	Fail	Pass

Unit Test Case 16 (UTC-16): showCartPage()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../showCart and go to cart page.	.../member/showCart	Pass	Pass	Pass
2	This method can't redirect to /showCarts by using a wrong URL: .../showCarts	.../member/showCarts	Fail	Fail	Pass

Unit Test Case 17 (UTC-17): checkOut ()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../checkout and go to cart page.	.../member/checkout	Pass	Pass	Pass
2	This method can't redirect to… / checkout by using a wrong URL: .../ checkouts	.../member/checkouts	Fail	Fail	Pass

Unit Test Case 18(UTC-18): list ()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../list and go to productList page.	.../member/list	Pass	Pass	Pass
2	This method can't redirect to… / list by using a wrong URL: .../ lists	.../member/lists	Fail	Fail	Pass

Unit Test Case 19 (UTC-19): search ()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to .../search and go to productList page.	.../search	Pass		
2	This method can't redirect to… / search by using a wrong URL: .../searchs	.../searchs	Fail		

Unit Test Case 20 (UTC-20): search(@PathVariable("keyword") String keyword, Model model)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can redirect to …/search/{keyword} and go to productList page.	…/member/search/A	Pass	Pass	Pass
2	This method can't redirect to… / search/{keyword} by using a wrong URL: …/searchs/{keyword}	…/member/searchs/A	Fail	Fail	Pass

Unit Test Case 21 (UTC-21): getMembers()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method get list of members	…/admin/memberlist	Display the list of members	Display the list of members	Pass

Unit Test Case 22 (UTC-22): findById(String username)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can get the member's information by username.	parun	Show member information that has "parun" as a username.	Show member information that has "parun" as a username.	Pass
2	This method cannot get the member's information because this username is not exists.	chalee	Show message "No result"	Show blank page	Fail

Unit Test Case 23 (UTC-23): searchMember(String keyword)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can get the list of members by keyword.	P	Show list of members that has letter "P" : Parun	Show list of members that has letter "P" : Parun	Pass
2	This method cannot get the information because it does not exist.	Z	Show message "No result"	Show blank page	Fail

Unit Test Case 24 (UTC-24): addProductInCart(ProductInCartproductInCart)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can add product into the shopping cart.	Add command	Show added product in shopping cart.	Show added product in shopping cart.	Pass

Unit Test Case 25 (UTC-25): deleteProductInCart(ProductInCartproductInCart)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can delete product from the shopping cart.	Delete command	Remove the deleted product from the shopping cart.	The product did not removed	Fail

Unit Test Case 26 (UTC-26): getProductInCarts()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method get list of products in the shopping cart	…/member/showCart	Show list of products in the shopping	Show list of products in the	Pass

			cart.	shopping cart.	

Unit Test Case 27 (UTC-27):addProduct(Product product)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can add product in the system	Product id, product name, product detail, price, picture, category	The product is added in product database.	The product is added in product database.	Pass

Unit Test Case 28 (UTC-28):getProduct()

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can get list of products from product database	…/admin/list	Show list of products	Show list of products	Pass

Unit Test Case 29 (UTC-29):searchProducts(String keyword)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can get the list of products by keyword.	A	Show list of products that has letter "A": A	Show list of products that has letter "A": A	Pass
2	This method cannot get the information because it does not exist.	O	Show message "No result"	Show blank page	Fail

Unit Test Case 30(UTC-30):searchByUser(String keyword)

ID	Description	Input	Expected	Actual	Pass/Fail

			Result	Result	
1	This method can get the list of product that ordered by the certain member.	parun	Show the product the member name "parun" has ordered.	Show the product the member name "parun" has ordered.	Pass
2	This method cannot get the information because it does not exist.	xxx	Show message "No result"	Show blank page	Fail

Unit Test Case 31(UTC-31):searchByDate(Date date)

ID	Description	Input	Expected Result	Actual Result	Pass/Fail
1	This method can get the list of product that ordered on the certain date.	16.1.2014	Show list of ordered products.	Show list of ordered products.	Pass
2	This method cannot get the information because there is no order for this date.	16.11.1995	Show message "No result"	Show blank page	Fail
3	This method cannot get the information because it is in wrong format.	1234567	Show message "Please input in date format"	Show blank page	Fail

System Testing

System Test Case (STC-01): Visitor shall register as a user to access the web application.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Input all required field in the registration form with the correct information.	Username = Noah Password = 1234 Name = Noah Address = CNX Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	The user information adds to database and the system will redirects to home page.	The user information adds to database and the system will redirects to home page.	Pass
2	Input some required field in the registration form with correct information.	Username = null Password = 1234 Name = Noah Address = CNX Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	Show alert message and the system will allow the user to input their information again.	Show alert message and the system will allow the user to input their information again.	Pass

System Test Case (STC-02): Visitor shall view all of products in the web application.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	The system redirect to the home page.	-	The system shows list of products that exist in the database.	The system shows list of products that exist in the database	Pass

System Test Case (STC-03): Member shall log in to access the web application.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Input valid username and password.	Username = parun Password = 1234	The system goes to home page	The system goes to home page	Pass
2	Input some fields.	Username = null Password = 1234	Alert message, please input username or password.	Redirect to index.jsp	Fail
3	Input incorrect username and password.	Username = ppppp Password = 4321	Alert message, Invalid username or password.	Redirect to index.jsp	Fail
4	Not enter both username and password	Username = null Password =	Alert message, please input	Redirect to index.jsp	Fail

		null	username or password.		

System Test Case (STC-04): Member shall search product by keyword.

ID	Description	Input	Expect Result	Actual Result
1	Input keywords in the search box	Cat	Show list of all exist products that are cat.	
2	Input meaningless keywords in the search box.	*5&@~	Alert message, the result is not found.	

System Test Case (STC-05): Member shall view all products in the web application.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	The system redirect to the home page.	-	The system shows list of products that exist in the database.	The system shows list of products that exist in the database.	Pass

System Test Case (STC-06): Admin shall view all customers' shopping history.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click view customers' shopping history	-	Show list of customer's shopping	Show list of customer's	Pass

			history.	shopping history.	

System Test Case (STC-07): Member shall view his/her profile.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click view profile	-	Show all information of the member, consists of username, name, address and picture.	Show all information of the member, consists of username, name, address and picture.	Pass

System Test Case (STC-08): Member shall add product to shopping cart.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click add on the product	Add command	The added product details appear on the shopping cart page.	The added product details appear on the shopping cart page.	Pass

System Test Case (STC-09): Member shall delete product from shopping cart.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click delete on the selected item	Delete command	The deleted item is	The product	Fail

			removed from the database and the shopping cart page.	sill remain in the database.	

System Test Case (STC-10): Member shall view shopping cart.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click view	-	Show all information from the shopping cart database on the shopping cart page.	Show all information from the shopping cart database on the shopping cart page.	Pass

System Test Case (STC-11): Member shall search his/her shopping history.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click on history link and the system will show: - product's name - price of product - Image of product.	-	The system shows list of history that have in database, that consist of - product's name - price of product - Image of product.	The system shows list of history that have in database, that consist of - product's name - price of product - Image of product.	Pass

System Test Case (STC-12): Member shall check out from the shopping process.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Clicks on the check out link.	-	The system shows summary, total price and display transaction method.	The system shows summary, total price and display transaction method.	Pass

System Test Case (STC-13): Member shall select transaction method.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	The member already chooses the options	-	The system will shows success message	-	Fail

System Test Case (STC-14): Admin shall log in to access the web application.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Input valid username and password.	Username: admin Password: 1234	Redirect to home page	Redirect to home page	Pass
2	Input some fields.	username = null password = 1234	Alert message, Invalid username or password.	Redirect to index.jsp	Fail
3	Input incorrect username and password.	username = adminsss password = admin	Redirect to index.jsp	Redirect to index.jsp	Pass

ID	Description	Input	Expect Result	Actual Result	Pass/fail
4	Not enter both username and password	username = null password = null	Alert message, can't access to home page.	Redirect to index.jsp	Fail

System Test Case (STC-15): Admin shall search history.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Input invalid userID.	userID: 00000	Alert message, Invalid userID.	Show no message	Fail
2	Input valid userID.	userID:M1234	The his/her history show on history page.	The his/her history show on history page.	Pass

System Test Case (STC-16): Admin shall view all customers' shopping history.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click on click history link and the system will show: -userID -userName - product's name - price of product - Image of product.	-	The system redirects to history page and shows list of history that have in database, that consist of -userID -userName - product's name - price of product	The system redirects to history page and shows list of history that have in database, that consist of -userID - userName	Pass

			- Image of product.	-product's name - price of product - Image of product.	

System Test Case (STC-17): Admin shall view all list of member.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click on click member link and the system will show: -Member ID -Member's Name - Image of member. -Address of member.	-	The system shows list of member that have in database, that consist of -Member ID -Member's Name - Image of member. -Address of member.		

System Test Case (STC-18): Admin shall search member.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Input invalid userID.	userID: 000000	Alert message, Invalid userID.	Show no message	Fail
2	Input valid userID.	userID:M1234	The his/her history show on history page.	The his/her history show on history	Pass

				page.	

System Test Case (STC-19): Admin shall search customer.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Input invalid userID.	userID: 000000	Alert message, Invalid userID.	Show no message	Fail
2	Input valid userID.	userID:M1234	The his/her history show on history page.	The his/her history show on history page.	Pass

System Test Case (STC-20):Admin shall view all products.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Click on click product link and the system will show: -Product ID -Product's Name - Image of product. -price of product.	-	The system shows list of product that have in database, that consist of -Product ID -Product's Name - Image of product. -price of product.	The system shows list of product that have in database, that consist of -Product ID - Product's Name - Image of product. -price of product.	Pass

System Test Case (STC-21): Admin shall add products.

ID	Description	Input	Expect Result	Actual Result	Pass/fail
1	Input all required field in add product detail form with all correct information.	Name:toey Description:it is Thai cat. Price:25 Amount:1 Picture:	The system will shows success message and add new product to database.	The system add new product to database.	Pass
2	Input all required field in add product detail form with all incorrect information.	Name:4535 Description:it is Thai cat. Price:cat Amount:cat Picture:	The system will shows alert message and a new product does not added to database.	The system will shows alert message and a new product does not added to database.	Pass
3	Input some required field in add product detail form.	NameNull Description:it is Thai cat. Price:25 Amount:1 Picture:	The system will shows alert message and a new product does not added to database.	The system will shows alert message and a new product does not added to database.	Pass

Acceptance Testing

Acceptance test case UAT- 01: Visitor shall register as a user to access the web application.

Test Objective	Visitor must able to register for access the web.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	11. The visitor input his/her username, password, name, address, and picture. 12. The visitor clicks done button. 13. The system will save the information into the database. 14. The system displays a successful message. 15. The system goes back to the log in page.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/F
1	Input all required field in the registration form with the correct information.	Username = Noah Password = 1234 Name = Noah Address = Thailand Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	The user information adds to database and the system will redirects to home page.	The user information adds to database and the system will redirects to home page.	pass
2	Input some required field in the registration form with correct information.	Username = null Password = 1234 Name = Noah Address = Thailand Picture = C:\Users\Alienware\MeowMeowShop\images cat1.png	Show alert message and the system will allow the user to input their information again.	Show alert message and the system will allow the user to input their information again.	pass

Acceptance test case UAT- 02: Visitor shall view all of products in the web application.

Test Objective	Visitor must able to view all of products in the web application.
Tested by	Nahathai Kaewtatib

Tested date	03/01/2014
Procedure step	5) The visitor enters the first page of the site. 6) The system provides the list of all products that exist in the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	The system redirect to the home page.	-	The system shows list of products that exist in the database.	The system shows list of products that exist in the database	pass

Acceptance test case UAT- 03: Member shall log in to access the web application.

Test Objective	Member must able to log in to access the web application.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	9. Admin inputs their username and password. 10. Admin clicks login button. 11. The system will verify with database. 12. The system allows the admin access to index page.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Input valid username and password.	Username = parun Password = 1234	The system goes to home page	The system goes to home page	Pass
2	Input some fields.	Username = null Password = 1234	Alert message, please input username or password.	Redirect to index.jsp	Fail
3	Input incorrect username and password.	Username = Noahsss Password = 4321	Username = Noahsss Password = 4321	Redirect to index.jsp	Fail

4	Not enter both username and password	Username = null Password = null	Alert message, please input username or password.	Redirect to index.jsp	Fail

Acceptance test case UAT- 04: Member shall search product by keyword.

Test Objective	Member must able to search product by keyword.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	9) The member enters the first page of the site. 10) The system provides a search box. 11) The member input some keywords. 12) The system provides list of products that contains the keyword and exist in the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/l
1	Input keywords in the search box	Cat	Show list of all exist products that are cat.		
2	Input meaningless keywords in the search box.	*5&@~	Alert message, the result is not found.		

Acceptance test case UAT- 05: Member shall view all products in the web application.

Test Objective	Member must able to view all products in the web application.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5) The member enters the first page of the site. 6) The system provides the list of all products that exist in the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	The system redirect to the home page.	-	The system shows list of products that exist in the database.	The system shows list of products that exist in the database.	Pass

Acceptance test case UAT- 06: Admin shall view all customers' shopping history.

Test Objective	Admin must able to view all customers' shopping history.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5) The admin enters to the shopping history page. 6) The system provides the list of shopping history for each customer.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click view customers' shopping history	-	Show list of customer's shopping history.	Show list of customer's shopping history.	Pass

Acceptance test case UAT- 07: Member shall view his/her profile.

Test Objective	Member must able to view his/her profile.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5) The member enters to the profile page. 6) The system provides the information of the member from the member database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click view profile	-	Show all information of the member, consists of username, name, address and picture.	Show all information of the member, consists of username,	Pass

				name, address and picture.	

Acceptance test case UAT- 08: Member shall add product to shopping cart.

Test Objective	Member must able to add product to shopping cart.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5) The member clicks add on the product. 6) The system displays the added product information on the shopping cart pa

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click add on the product	Add command	The added product details appear on the shopping cart page.	The added product details appear on the shopping cart page.	pass

Acceptance test case UAT- 09: Member shall delete product from shopping cart.

Test Objective	Member must able to delete product from shopping cart.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	11) The member enters to the shopping cart page. 12) The system displays the added product information on the shopping cart pa 13) The member selects the desire item. 14) The member deletes the selected item. 15) The system deletes the selected item from the shopping cart database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click delete on the selected item	Delete command	The deleted item is removed from the database and the shopping cart page.	The product sill remain in the database.	Fail

Acceptance test case UAT- 10: Member shall view shopping cart.

Test Objective	Member must able to view shopping cart.

Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5) The member enters to the shopping cart page. 6) The system provides the list of all products and details that exist in the shopping cart database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/l
1	Click view	-	Show all information from the shopping cart database on the shopping cart page.	Show all information from the shopping cart database on the shopping cart page.	Pass

Acceptance test case UAT- 11: Member shall search his/her shopping history.

Test Objective	Member must able to search his/her shopping history.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5. The member click on history link on menu bar. 6. The system will show his/her shopping history.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/l
1	Click on history link and the system will show: - product's name - price of product - Image of product.	-	The system shows list of history that have in database, that consist of - product's name - price of product - Image of product.	The system shows list of history that have in database, that consist of - product's name - price of product - Image of product.	Pass

Acceptance test case UAT- 12: Member shall check out from the shopping.

Test Objective	Member must able to check out from the shopping.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	7. The member clicks the check out link. 8. The system displays the summary and the total price of what the membe has shopped. 9. The system displays the transaction methods.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Clicks on the check out link..	-	The system shows summary, total price and display transaction method.	The system shows summary, total price and display transaction method.	Pass

Acceptance test case UAT- 13: Member shall select transaction method.

Test Objective	Member must able to select transaction method.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	9. The member clicks the transactional link. 10. The system displays various options for the member to choose. 11. The member chooses the options that want to transactional. 12. The system record.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/Fail
1	The member already chooses the options	-	The system will shows success message	-	Fail

Acceptance test case UAT- 14: Admin shall log in to access the web

Test Objective	Admin must able to log in to access the web
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5. The member clicks the transactional link. 6. The system displays various options for the member to choose. 7. The member chooses the options that want to transactional. 8. The system record.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Input valid username and password.	Username: admin Password: 1234	Redirect to home page	Redirect to home page	Pass
2	Input some fields.	username = null password = 1234	Alert message, Invalid username or password.	Redirect to index.jsp	Fail
3	Input incorrect username and password.	username = adminsss password = admin	Redirect to index.jsp	Redirect to index.jsp	pass
4	Not enter both username and	username = null	Alert message, can't access to home page.		

Acceptance test case UAT- 15: Admin shall search history.

Test Objective	Admin must able to Admin shall search history.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5. The admin input member's id on search box. 6. The system displays history of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I

	1	Input invalid userID.	userID: 0000	Alert message, Invalid userID.	Show no message	Fail
	2	Input valid userID.	userID: M1234	The his/her history show on history page.	Show no message	Pass

Acceptance test case UAT- 16: Admin shall view all customers' shopping

Test Objective	Admin must able to view all customers' shopping
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3. The admin input member's id on search box. 4. The system displays history of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click on click history link and the system will show: -userID -userName - product's name - price of product - Image of product.	-	The system redirects to history page and shows list of history that have in database, that consist of -userID -userName - product's name - price of product - Image of product.	The system redirects to history page and shows list of history that have in database, that consist of -userID -userName - product's name - price of product - Image of product.	Pass

Acceptance test case UAT- 17: Admin shall view all list of member.

Test Objective	Admin must able to view all list of member.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3. The admin click member link. 4. The system displays list of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/F
1	Click on click member link and the system will show: -Member ID -Member's Name - Image of member. -Address of member.	-	The system shows list of member that have in database, that consist of -Member ID -Member's Name - Image of member. -Address of member.		

Acceptance test case UAT- 18: Admin shall search member.

Test Objective	Admin must able to view all list of member.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	3. The admin input keyword on search box. 4. The system displays list of member.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/F
1	Input invalid userID.	userID: 000000	Alert message, Invalid userID.	Show no message	Fail
2	Input valid userID.	userID:M1234	The his/her history show on history page.	The his/her history show on history page.	Pass

Acceptance test case UAT- 19: Admin shall view all products.

Test Objective	Admin must able to view all products.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	5. The admin click product link. 6. The system displays the list products of the web application.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Click on click product link and the system will show: -Product ID -Product's Name - Image of product. -price of product.	-	The system shows list of product that have in database, that consist of -Product ID -Product's Name - Image of product. -price of product.	The system shows list of product that have in database, that consist of -Product ID -Product's Name - Image of product. -price of product.	Pass

Acceptance test case UAT- 20: Admin shall add products.

Test Objective	Admin must able to add products.
Tested by	Nahathai Kaewtatib
Tested date	03/01/2014
Procedure step	11. The admin clicks add product link 12. The system provides the interface for the admin to input the information. 13. The admin input information. 14. The admin clicks save. 15. The system adds the information to the database.

Result:

ID	Description	Input	Expect Output	Actual Output	Pass/I
1	Input all required field in add product detail form with all correct information.	Name:toey Description:it is Thai cat. Price:25 Amount:1 Picture:	The system will shows success message and add new product to database.	The system add new product to database.	Pass
2	Input all required field in add product detail form with all incorrect information.	Name:4535 Description:it is Thai cat. Price:cat Amount:cat Picture:	The system will shows alert message and a new product does not added to database.	The system will shows alert message and a new product does not added to database.	Pass

| 3 | Input some required field in add product detail form. | NameNull Description:it is Thai cat. Price:25 Amount:1 Picture: | The system will shows alert message and a new product does not added to database. | The system will shows alert message and a new product does not added to database. | Pass |

Traceability Matrix

User Requirement Specification and System test case.

	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16	U17	U18	U19
STC-01	■																		
STC-02		■																	
STC-03			■																
STC-04				■															
STC-05					■														
STC-06						■													
STC-07							■												
STC-08								■											
STC-09									■										
STC-10										■									
STC-11											■								
Stc-12												■							
STC-13													■						
STC-14														■					
STC-15															■				
STC-16																■			
STC-17																	■		
STC-18																		■	
STC-19																			■
STC-20																			■

Unit Test Case and Method

Unit Test Case	Method
Unit Test Case 01 (UTC-01)	showMemberRegisterPage(Model model)
Unit Test Case 02 (UTC-02)	login()
Unit Test Case 03 (UTC-03)	addValidMember()
Unit Test Case 04 (UTC-04)	addValidMember()
Unit Test Case 05 (UTC-05)	deinedPage()
Unit Test Case 06 (UTC-06)	showOrderedLog(@ModelAttribute("userSession") User user, ModelMap model)
Unit Test Case 07 (UTC-07)	searchOrderedLogByUser(@ModelAttribute("userSession") User user,@PathVariable("keyword")String s,ModelMap model)
Unit Test Case 08 (UTC-08)	list(Model model)
Unit Test Case 09 (UTC-09)	search(Model model)
Unit Test Case 10 (UTC-10)	search(@PathVariable("keyword") String keyword, Model model)
Unit Test Case 11 (UTC-11)	addProduct()
Unit Test Case 12 (UTC-12)	productList ()
Unit Test Case 13 (UTC-13)	getToProfilePage()
Unit Test Case 14 (UTC-14)	updateMember ()
Unit Test Case 15 (UTC-15)	addToCart()
Unit Test Case 16 (UTC-16)	showCartPage()
Unit Test Case 17	checkOut ()

(UTC-17)	
Unit Test Case 18 (UTC-18)	list ()
Unit Test Case 19 (UTC-19)	search ()
Unit Test Case 20 (UTC-20)	search(@PathVariable("keyword") String keyword, Model model)
Unit Test Case 21 (UTC-21)	getMembers()
Unit Test Case 22 (UTC-22)	findById(String username)
Unit Test Case 23 (UTC-23)	searchMember(String keyword)
Unit Test Case 24 (UTC-24)	addProductInCart(ProductInCartproductInCart)
Unit Test Case 25 (UTC-25)	deleteProductInCart(ProductInCartproductInCart)
Unit Test Case 26 (UTC-26)	getProductInCarts()
Unit Test Case 27 (UTC-27)	addProduct(Product product)
Unit Test Case 28 (UTC-28)	getProduct()
Unit Test Case 29 (UTC-29)	searchProducts(String keyword)
Unit Test Case 30 (UTC-30)	searchByUser(String keyword)
Unit Test Case 31(UTC-31)	searchByDate(Date date)

User Requirement Specification and Acceptance test case

	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16	U17	U18	U19
UAT-01	■																		
UAT-02		■																	
UAT-03			■																
UAT-04				■															
UAT-05					■														
UAT-06						■													
UAT-07							■												
UAT-08								■											
UAT-09									■										
UAT-10										■									
UAT-11											■								
UAT-12												■							
UAT-13													■						
UAT-14														■					
UAT-15															■				
UAT-16																■			
UAT-17																	■		
UAT-18																		■	
UAT-19																			■
UAT-20																			