**Unit Test**

Class: CUSTOMERSERVICE

**Test Case no.1**

Public Customer Login(Customer customer)

Description

This test case tests Customer Login(Customer customer) method to see that user can login with valid and matched username and password and can not login with invalid to unmatched username and password.

| Test case | description | Input | Excepted output |
| --- | --- | --- | --- |
| 1 | the method can enable user to login with valid and matched username and password | username=‘[se5421115511@vr.camt.info](mailto:se5421115511@vr.camt.info)’  password=‘542115511’ | pass |
| 2 | the method can not enable user to login with invalid username | username=‘se542115511camt.info’  password=‘542115511’ | fail |
| 3 | the method can not enable user to login with invalid password | username=‘[se5421115511@vr.camt.info](mailto:se5421115511@vr.camt.info)’  password=‘54’ | fail |
| 4 | the method can not enable user to login with unmatched username and password | username=‘[se5421115511@vr.camt.info](mailto:se5421115511@vr.camt.info)’  password=‘542115512’ | fail |

**Test Case no.2**

Public List<Product> SearchProductByName(String productName)

Description

This test case tests List<Product> SearchProductByName(String productName) method to see it can find the product list form the persistent by the existed product name and can not find with not existed product name.

| test case | description | input | expected result |
| --- | --- | --- | --- |
| 1 | the method can find the products in persistence by the existed product name | productName=‘Iphone 4s’ | pass |
| 2 | the method can not find the products in persistence by the not existed product name | productName=‘AA’ | fail |

**Test Case no.3**

Public void AddToShoppingCart(Product product)

Description

This test case tests void AddToShoppingCart(Product product) method to see it can add a product to shopping cart.

| test case | description | input | expected result |
| --- | --- | --- | --- |
| 1 | the method can add one product to database | product A | pass |

**Test Case no.4**

Public Customer CheckOut(Customer customer)

Description

This test case tests Customer CheckOut(Customer customer) method to see it enables user to check out the account.

| test case | description | expected result |
| --- | --- | --- |
| 1 | this method can logout and redirect to login page | pass |

**Test Case no.5**

Public Customer SaveShoppingCart(Customer customer)

Description

This test case tests Customer SaveShoppingCart(Customer customer) method to see it can save the shopping cart to database or not.

| test case | description | expected output |
| --- | --- | --- |
| 1 | this method can add a shopping cart to user’s account | past |

**Test Case no.6**

Public Customer EditProfile(Customer customer)

Description

This test case tests Public Customer EditProfile(Customer customer) method to see it can edit user’s profile picture or not.

| test case | description | input | expected output |
| --- | --- | --- | --- |
| 1 | this method can edit user’s profile picture. | customer A | pass |

**Test Case no.7**

Public Customer Register(Customer customer)

Description

This test case tests Customer Register(Customer customer) method to see it can add a new customer with validate username and password to the system and can not add a new customer to system with invalidate inputs.

| test case | description | input | expected output |
| --- | --- | --- | --- |
| 1 | this method can add a new customer to system with valid username and password | username=“781832265@qq.com”  password=“chenyuke”  address=“chiangmai, Thailand”  picture=test.jpg | pass |
| 2 | this method can not add a new customer to system with invalid username | username=“781832265qq.com”  password=“chenyuke”  address=“chiangmai, Thailand”  picture=test.jpg | fail |
| 3 | his method can not add a new customer to system with invalid password | username=“781832265@qq.com”  password=“c”  address=“chiangmai, Thailand”  picture=test.jpg | fail |

**Test Case no.8**

Public Customer getCurrentCustomer()

Description

This test case tests Customer getCurrentCustomer() method to see it can get the user’s information according to the username.

| test case | description | expected output |
| --- | --- | --- |
| 1 | this method can get the information of the user that login currently. | pass |

**Test Case no.9**

Public Customer setCurrentCustomer(Customer customer)

Description

This test case tests Customer setCurrentCustomer(Customer customer) method to see it can set the customer login currently to be the current customer or not.

| test case | description | expected output |
| --- | --- | --- |
| 1 | this method can set the customer who login currently to be the current user | pass |

**Test Case no.10**

Public ShoppingCart getSaveShoppingCart(Customer customer)

| test case | description | input | expected result |
| --- | --- | --- | --- |
| 1 | this method can edit the information of product already existed in system | Product A | pass |

Description

This test case tests ShoppingCart getSaveShoppingCart(Customer customer) method to see it can get the shopping cart in persistence according to customer login currently or not.

| test case | description | expected result |
| --- | --- | --- |
| 1 | this method can get the shopping cart saved form the database fort the current customer | pass |

Class: ADMINISTRATORSERVICE

**Test Case no.11**

Public Product EditProductInfo(Product product)

Description

This test case tests Product EditProductInfo(Product product) method to see it can edit the product information in database or not.

**Test Case no.12**

Public List<ShoppingHistory> ScanShoppingHistory()

Description

This test case tests List<ShoppingHistory> ScanShoppingHistory() method to see it can get all the shopping histories in the database or not.

| test case | description | expected result |
| --- | --- | --- |
| 1 | this method can get all the shopping histories inside the database | pass |

**Test Case no.13**

Public Administrator Login(Administrator admin)

Description

This test case tests Public Administrator Login(Administrator admin) method to see it can enable admin to login with valid and matched username and password and can not login with invalid inputs.

| test case | description | input | expected output |
| --- | --- | --- | --- |
| 1 | this method should enable admin login with valid, matched username and password | username=‘[se5421115507@vr.camt.info](mailto:se5421115507@vr.camt.info?subject=)’  password=‘542115507’ | pass |
| 2 | this method should not enable admin to login with invalid username | username=“542115507vr.cant.info”  password=‘542115507’ | fail |
| 3 | this method should not enable admin to login with invalid username | username=‘[se5421115507@vr.camt.info](mailto:se5421115507@vr.camt.info?subject=)’  password=‘5’ | fail |
| 4 | his method should not enable admin to login with invalid username | username=‘[se5421115507@vr.camt.info](mailto:se5421115507@vr.camt.info?subject=)’  password=‘542115510’ | fail |

Class CustomerDAO

**Test Case no.14**

Public Customer getCustomerById(String customerID)

Description

This test case tests Customer getCustomerById(String customerID) method to see it can get the customer form the database according the customer’s id or not.

| test case | description | input | expected output |
| --- | --- | --- | --- |
| 1 | this method can retrieve a customer form database with valid and existed customer id | 1 | pass |
| 2 | this method can retrieve a customer form database with invalid customer id | 4e | fail |
| 3 | this method can retrieve a customer form database with not existed customer id | 123 | fail |

**Test Case no.15**

Public Customer addCustomer(Customer customer)

Description

This test case tests Customer addCustomer(Customer customer) method to see it can add a customer to database or not.

| test case | description | input | expected output |
| --- | --- | --- | --- |
| 1 | this method could add customer to database | customer A | pass |

**Test Case no.16**

Public Customer updateCustomer(Customer customer)

Description

This test case tests Customer updateCustomer(Customer customer) method to see it can update the information of current customer.

| test case | description | input | expected output |
| --- | --- | --- | --- |
| 1 | this method can update the information current customer | customer B | pass |

**Test Case no.17**

Public List<Customer> getCustomers()

Description

This test case tests List<Customer> getCustomers() method to see it can get all the customers in the database or not.

| test case | description | expected output |
| --- | --- | --- |
| 1 | this method can get all the customers in the database | pass |