**URS 01, URS 02:**

**Description:** Test user log in.

**Unit Test Case 1(UTC-01):** public Collection<GrantedAuthority> getAuthorities(Integer access)

**Test Data:** \*The test data is already exists in database.

**Test Class:** UserDetailServiceImpl

**#Member**

|  |  |
| --- | --- |
| Name | “Kanokwan Maneerat” |
| Address | “Chiang Mai” |
| Username | “Gloyjai123” |
| Password | “Bt999” |
| Re-password | “Bt999” |
| Image | vcm_s_kf_m160_155x160.jpg  Me.jpg |

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Username** |
| 1 | Test log in which existed in database. | “Gloyjai123” | true |
| 2 | Test log in which not existed in database. | “Kiki000” | false |
| 3 | Test adds no data. | null | null |

**Unit Test Case 2(UTC-02):** public Collection<GrantedAuthority> getAuthorities(Integer access)

**Test Data:** \*The test data is already exists in database.

**Test Class:** UserDetailServiceImpl

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Case** | **Description** | **Input** | | **Expected**  **Result** |
| **Username** | **Password** |
| 1 | Test password which existed in database. | “Gloyjai123” | “Bt999” | true |
| 2 | Test password which not existed in database. | “Kiki000” | “1234” | false |
| 3 | Test adds no data. | null | | null |

**URS 03:**

**Description:** Test user makes a registration to the system.

**Unit Test Case 3(UTC-03):** public String addValidCustomer(@Valid Customer customer, BindingResult bindingResult, Model model

, @RequestParam("file")MultipartFile file)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Name** |
| 1 | Test adds name with valid name. | “Kanokwan Maneerat” | true |
| 2 | Test adds name with wrong name. [The object with wrong condition is limit.] | “Worapan67” | false |
| 3 | Test add no data | null | null |

**Unit Test Case 4(UTC-04):** public String addValidCustomer(@Valid Customer customer, BindingResult bindingResult, Model model

, @RequestParam("file")MultipartFile file)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Address** |
| 1 | Test add no data | null | null |

**Unit Test Case 5(UTC-05):** public String addValidCustomer(@Valid Customer customer, BindingResult bindingResult, Model model

, @RequestParam("file")MultipartFile file)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Username** |
| 1 | Test adds name with valid name. | “Kanokwan Maneerat” | true |
| 2 | Test adds name with duplicate name. \*[The object with duplicate data are already in database] | “Worapan67” | false |
| 3 | Test add no data | null | null |

**Unit Test Case 6(UTC-06):** public String addValidCustomer(@Valid Customer customer, BindingResult bindingResult, Model model

, @RequestParam("file")MultipartFile file)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Password** |
| 1 | Test adds password with valid password. | “Bt999” | true |
| 2 | Test adds password with wrong condition. [The object with wrong condition is limit.] | “1” | false |
| 3 | Test add no data | null | null |

**Unit Test Case 7(UTC-07):** public String addValidCustomer(@Valid Customer customer, BindingResult bindingResult, Model model

, @RequestParam("file")MultipartFile file)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Re-password** |
| 1 | Test adds re-password with valid password. | “Bt999” | true |
| 2 | Test adds re-password with not similar to password. | “1234” | false |
| 3 | Test add no data | null | null |

**Unit Test Case 8(UTC-08):** public String addValidCustomer(@Valid Customer customer, BindingResult bindingResult, Model model

, @RequestParam("file")MultipartFile file)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Image** |
| 1 | Test adds image with valid condition. | vcm_s_kf_m160_155x160.jpg  Me.jpg | true |
| 2 | Test adds image with not support file type. | vcm_s_kf_m160_155x160.jpg  Me.gif | false |
| 3 | Test add no data | null | null |

**URS 04:**

**Description:** Test updates customer detail in database.

**Unit Test Case 9(UTC-09):** public String updateCustomer(@PathVariable("id") Integer id, Model model)

**Test Data: \***The test data is already existed in database.

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Name** |
| 1 | Test updates name with valid name. | “Kanokwan Maneerat” | true |
| 2 | Test updates name with wrong name. [The object with wrong condition is limit.] | “Worapan67” | false |
| 3 | Test updates no data | null | null |

**Unit Test Case 10(UTC-10):** public String updateCustomer(@PathVariable("id") Integer id, Model model)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Address** |
| 1 | Test updates no data | null | null |

**Unit Test Case 11(UTC-11):** public String updateCustomer(@PathVariable("id") Integer id, Model model)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Username** |
| 1 | Test updates username with valid username. | “Kanokwan Maneerat” | true |
| 2 | Test adds username with duplicate name. \*[The object with duplicate data are already in database] | “Worapan67” | false |
| 3 | Test update no data | null | null |

**Unit Test Case 12(UTC-12):** public String updateCustomer(@PathVariable("id") Integer id, Model model)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Password** |
| 1 | Test update password with valid password. | “Bt999” | true |
| 2 | Test update password with wrong condition. [The object with wrong condition is limit.] | “1” | false |
| 3 | Test update no data | null | null |

**Unit Test Case 13(UTC-13):** public String updateCustomer(@PathVariable("id") Integer id, Model model)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Re-password** |
| 1 | Test updates re-password with valid password. | “Bt999” | true |
| 2 | Test update re-password with not similar to password. | “1234” | false |
| 3 | Test update no data | null | null |

**Unit Test Case 14(UTC-14):** public String updateCustomer(@PathVariable("id") Integer id, Model model)

**Test Class:** CustomerController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Image** |
| 1 | Test update image with valid condition. | vcm_s_kf_m160_155x160.jpg  Me.jpg | true |
| 2 | Test update image with not support file type. | vcm_s_kf_m160_155x160.jpg  Me.gif | false |
| 3 | Test update no data | null | null |

**URS 05:**

**Description:** Test user log out**.**

**Unit Test Case 15(UTC-15):** public String getLoginPage(@RequestParam(value="error", required=false) boolean error,

ModelMap model)

**Test Class:** LoginLogoutController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Image** |
| 1 | Test user logout with valid condition. | Logout | true |
| 3 | Test adds no data | null | null |

**URS 06:**

**Description:** Test administrator adds products.

**Unit Test Case 16(UTC-16):** public String addProduct (@ModelAttribute Product product, BindingResult bindingResult,Model model)

**Test Data: \***The test data is already existed in database.

**Test Class:** ProductController

**#Product**

|  |  |
| --- | --- |
| PID | 123456 |
| Product Name | Brownie |
| Product Description | A brownie is a chocolate flat. |
| Price | 29.00 |
| Image | Aglayan pasta.jpg  Brownie.jpg |

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **PID** |
| 1 | Test adds product’s id with valid id. | “123456” | true |
| 2 | Test adds product’s id with wrong id. \*[The object with duplicate data in database.] | “123456” | false |
| 3 | Test add no data | null | null |

**Unit Test Case 17(UTC-17):** public String addProduct (@ModelAttribute Product product, BindingResult bindingResult,Model model)

**Test Data: \***The test data is already existed in database.

**Test Class:** ProductController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Name** |
| 1 | Test adds name with valid name. | “Brownie” | True |
| 2 | Test adds product’s name with wrong condition. \*[The object with wrong condition is limit.] | “Brownie43” | False |
| 3 | Test add no data | null | null |

**Unit Test Case 18(UTC-18):** public String addProduct (@ModelAttribute Product product, BindingResult bindingResult,Model model)

**Test Data: \***The test data is already existed in database.

**Test Class:** ProductController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Description** |
| 1 | Test add no data | null | null |

**Unit Test Case 19(UTC-19):** public String addProduct (@ModelAttribute Product product, BindingResult bindingResult,Model model)

**Test Data: \***The test data is already existed in database.

**Test Class:** ProductController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Price** |
| 1 | Test adds price with valid type. | “29.00” | true |
| 2 | Test adds price with wrong condition. [The object with wrong condition is limit.] | “100” | false |
| 3 | Test add no data | null | null |

**Unit Test Case 20(UTC-20):** public String addProduct (@ModelAttribute Product product, BindingResult bindingResult,Model model)

**Test Data: \***The test data is already existed in database.

**Test Class:** ProductController

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Description** | **Input** | **Expected**  **Result** |
| **Image** |
| 1 | Test adds image with valid condition. | Aglayan pasta.jpg  Brownie.jpg | true |
| 2 | Test adds image with not support file type. | Aglayan pasta.jpg  Brownie.jpg | false |
| 3 | Test add no data | null | null |