**Document History**

Table Content

# Chapter One | 6.1 Software Testing

White Box technique (UT01-UT27)

|  |  |
| --- | --- |
| **Unit Test ID** | **Test Feature** |
| **UT01** | Class HomeController: getIndex() |
| **UT02** | Class HomeController: getLogin() |
| **UT03** | Class HomeController: getRegister() |
| **UT04** | Class HomeController: getCharts() |
| **UT05** | Class HomeController: getLogout() |
| **UT06** | Class HomeController: getSearch(Request request) |
| **UT07** | Class HomeController: getFeedback() |
| **UT08** | Class HomeController: postFeedback(Request request) |
| **UT09** | Class HomeController: postLogin(Request request) |
| **UT10** | Class HomeController: postRegister(Request request) |
| **UT11** | Class PlanController: getIndex() |
| **UT12** | Class PlanController: getClear() |
| **UT13** | Class PlanController: getDelete(Request $request) |
| **UT14** | Class PlanController: postIndex(Request request) |
| **UT15** | Class PlanController: postCategory(Request request) |
| **UT16** | Class PlanController: postRestrict(Request request) |
| **UT17** | Class PlanController: postDeleteRestrict(Request request) |
| **UT18** | Class ProgressController: getIndex(Request $request) |
| **UT19** | Class ExpenseController: getIndex() |
| **UT20** | Class ExpenseController: postFinance(Request request) |
| **UT21** | Class ExpenseController: postDelete(Request request) |
| **UT22** | Class AdminController: getIndex() |
| **UT23** | Class AdminController: getUser() |
| **UT24** | Class AdminController: getFeedback() |
| **UT25** | Class AdminController: postIndex(Request request) |
| **UT26** | Class AdminController: postDeleteUser(Request request) |
| **UT27** | Class AdminController: getLogout() |

**Table 6.1:** White Box testing technique (UT01-UT27)

Black Box technique (ST01-ST17)

|  |  |
| --- | --- |
| **Use Case ID** | **Use case name** |
| **ST01** | Register to the system. |
| **ST02** | Login to the system. |
| **ST03** | Logout to the system. |
| **ST04** | Edit user personal information. |
| **ST05** | Custom notification. |
| **ST06** | Delete user information. (Admin) |
| **ST07** | Create financial plan. |
| **ST08** | Manage financial plan. |
| **ST09** | Custom limit category of expense. |
| **ST10** | View summary financial plan of the month. |
| **ST11** | Add daily expense/income. |
| **ST12** | Delete added expense/income. |
| **ST13** | View charts. |
| **ST14** | Search expense/income history. |
| **ST15** | Get financial report. |
| **ST16** | Send feedback. |
| **ST17** | View feedback. (Admin) |

**Table 5.2:** Black Box testing technique (ST01-ST17)

## 

## 6.1.1 Unit Testing

## 5.3.4 System Test

Black Box technique (ST01-ST23)

|  |  |
| --- | --- |
| **Use Case ID** | **Use case name** |
| **ST01** | Login to the system. |
| **ST02** | Logout to the system. |
| **ST03** | Nurse can registration patient to Web Application. |
| **ST04** | Patient can view information of his on profile page. |
| **ST05** | Patient can update info on his profile page. |
| **ST06** | Patient can change password. |
| **ST07** | Admin can add user to system. |
| **ST08** | Admin can edit information of user. |
| **ST09** | Admin can delete user from system |
| **ST10** | Nutritionists can add food to the database. |
| **ST11** | Nutritionists can edit food on the database. |
| **ST12** | Nutritionists can delete food from the database |
| **ST13** | Nurse/Doctor can add food to the database. |
| **ST14** | Nurse/Doctor can edit food on the database. |
| **ST15** | Nurse/Doctor can delete food from the database |
| **ST16** | Patient can select the foods from database. |
| **ST17** | Patient can select the activity from database. |
| **ST18** | Patient can view body mass value that calculated. |
| **ST19** | Patient can record blood sugar. |
| **ST20** | Patient can view statistic graph of blood sugar. |
| **ST21** | Patient can get recommend about blood sugar from system. |
| **ST22** | Patient can select food. |
| **ST23** | Patient can submit and view about analyze result. |

**Table 5.2:** Black Box testing technique (ST01-ST23)

### Feature#1 Authentication system.

**ST01:** Login to the system.

|  |  |
| --- | --- |
| **Description** | Test for **UC01**: Login to the system. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system redirect to index page. | The system redirect to index page. | Pass |
| 2 | The system display error message " Invalid login attempt." | The system display error message " Invalid login attempt." | Pass |
| 3 | The system display error message “The UserName field is required.”, “The Password field is required.” | The system display error message “The UserName field is required.”, “The Password field is required.” | Pass |

**Table 6.32**: Test Case of **ST01:** Login to the system.

**ST02:** Logout the system.

|  |  |
| --- | --- |
| **Description** | Test for **UC02**: Logout the system. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system redirect to login page. | The system redirect to login page. | Pass |

**Table 6.33**: Test Case of **ST02:** Logout the system..

### Feature#2: Account management.

### ST03: Register to the system.

|  |  |
| --- | --- |
| **Description** | Test for **UC03**: Nurse can registration patient to Web Application. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system saves the user information into database. | The system saves the user information into database. | Pass |
| 2 | The system display error message “The Email field is not a valid e-mail address.” | The system display error message “The Email field is not a valid e-mail address.” | Pass |
| 3 | The system display error message “The password and confirmation password do not match” | The system display error message “The password and confirmation password do not match” | Pass |
| 4 | The system display error message “Please fill out this field.” | The system display error message “Please fill out this field.” | Pass |
| 5 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.35**: Test Case of **ST03**: Nurse can registration patient to Web Application.

#### 

**ST04:** Patient can view information of his on profile page.

|  |  |
| --- | --- |
| **Description** | Test for **UC04**: Patient can view information of his on profile page. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system redirect to profile page and display pertinent information. | The system redirect to profile page and display pertinent information. | Pass |

**Table 6.36**: Test Case of **ST04:** Patient can view information of his on profile page.

#### **ST05:** Patient can update info on his profile page.

|  |  |
| --- | --- |
| **Description** | Test for **UC05**: Patient can update info on his profile page. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system save the user information into database. | The system save the user information into database. | Pass |
| 2 | The system display error message “field is required.” | The system display error message “field is required.” | pass |
| 3 | The system display error message “The Email field is not a valid e-mail address.” | The system display error message “The Email field is not a valid e-mail address.” | pass |

**Table 6.37**: Test Case of **ST05:** Patient can update info on his profile page.

### 

#### **ST06:** Patient can change password.

|  |  |
| --- | --- |
| **Description** | Test for **UC06:** Patient can change password. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system get new password and save change in the database | The system get new password and save change in the database | Pass |
| 2 | The system display error message " current password invalid." | The system display error message " current password invalid." | Pass |
| 3 | The system display error message “confirm password not match” | The system display error message “confirm password not match” | Pass |
| 4 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.38**: Test Case of **ST06:** Patient can change password.

#### 

#### **ST07:** Admin can add user to system.

|  |  |
| --- | --- |
| **Description** | Test for **UC07:** Admin can add nutritionists to system. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall record the data on the database. | The system shall record the data on the database. | Pass |
| 2 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.39**: Test Case of **ST07:** Admin can add nutritionists to system.

#### **ST08:** Admin can edit information of nutritionists.

|  |  |
| --- | --- |
| **Description** | Test for **UC07:** Admin can edit information of nutritionists. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall record the data on the database. | The system shall record the data on the database. | Pass |
| 2 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.40**: Test Case of **ST08:** Admin can edit information of nutritionists.

#### 

**ST09:** Admin can delete nutritionists from system

|  |  |
| --- | --- |
| **Description** | Test for **UC07:** Admin can delete nutritionists from system |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall delete the nutritionists from the database. | The system shall delete the nutritionists from the database. | Pass |

**Table 6.41**: Test Case of **ST09:** Admin can delete nutritionists from system

**Feature#3: Nutrition management.**

#### **ST10:** Nutritionists can add food to the database.

|  |  |
| --- | --- |
| **Description** | Test for **UC08:** Nutritionists can add food to the database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall record the data on the database. | The system shall record the data on the database. | Pass |
| 2 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.39**: Test Case of **ST10:** Nutritionists can add food to the database.

#### **ST11:** Nutritionists can edit food on the database.

|  |  |
| --- | --- |
| **Description** | Test for **UC08:** Nutritionists can edit food on the database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall record the data on the database. | The system shall record the data on the database. | Pass |
| 2 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.40**: Test Case of **ST11:** Nutritionists can edit food on the database.

**ST12:** Nutritionists can delete food from the database.

|  |  |
| --- | --- |
| **Description** | Test for **UC08:** Nutritionists can delete food from the database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall delete the nutritionists from the database. | The system shall delete the nutritionists from the database. | Pass |

**Table 6.41**: Test Case of **ST12:** Nutritionists can delete food from the database.

**Feature#4: Activity management.**

#### **ST13:** Nurse/Doctor can add activity to the database.

|  |  |
| --- | --- |
| **Description** | Test for **UC09:** Nurse/Doctor can add activity to the database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall record the data on the database. | The system shall record the data on the database. | Pass |
| 2 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.39**: Test Case of **ST13:** Nurse/Doctor can add activity to the database.

#### **ST14:** Nurse/Doctor can edit activity on the database.

|  |  |
| --- | --- |
| **Description** | Test for **UC09:** Nurse/Doctor can edit activity on the database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall record the data on the database. | The system shall record the data on the database. | Pass |
| 2 | The system display error message “field is required.” | The system display error message “field is required.” | Pass |

**Table 6.40**: Test Case of **ST14:** Nurse/Doctor can edit activity on the database.

**ST15:** Nurse/Doctor can delete activity from the database.

|  |  |
| --- | --- |
| **Description** | Test for **UC09:** Nurse/Doctor can delete activity from the database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall delete the activity from the database. | The system shall delete the activity from the database. | Pass |

**Table 6.41**: Test Case of **ST15:** Nurse/Doctor can delete activity from the database.

**Feature#5: Activity plan and recommend system.**

#### **ST16:** Patient can select the activity from database.

|  |  |
| --- | --- |
| **Description** | Test for **UC10:** Patient can select the activity from database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall provide list of symptom to patient. | The system shall provide list of symptom to patient. | Pass |
| 2 | The system shall provide suggestion about precautions exercise. | The system shall provide suggestion about precautions exercise. | Pass |

**Table 6.42**: Test Case of **ST16:** Patient can select the activity from database.

**Feature#6: Nutrition plan system.**

#### **ST17:** Patient can select the foods from database.

|  |  |
| --- | --- |
| **Description** | Test for **UC12:** Patient can select the foods from database. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall provide list of food name to patient. | The system shall provide list of food name to patient. | Pass |
| 2 | The system shall review name of food to patient. | The system shall review name of food to patient. | Pass |

**Table 6.42**: Test Case of **ST17:** Patient can select the foods from database.

**Feature#7: Health monitors system.**

**ST18:** Patient can view body mass value that calculated.

|  |  |
| --- | --- |
| **Description** | Test for **UC16**: Patient can view body mass value that calculated. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system redirect to health plan page and display BMI. | The system redirect to health plan page and display BMI. | Pass |

**Table 6.43**: Test Case of **ST18:** Patient can view body mass value that calculated.

#### 

#### **ST19:** Patient can record blood sugar.

|  |  |
| --- | --- |
| **Description** | Test for **UC15:** Patient can record blood sugar. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system record value of blood sugar to the database and dis play on graph. | The system record value of blood sugar to the database and dis play on graph. | Pass |
| 2 | The system display error message “value are minus” | The system display error message “value are minus” | Pass |

**Table 6.44**: Test Case of **ST19:** Patient can record blood sugar.

#### **ST20:** Patient can view statistic graph of blood sugar.

|  |  |
| --- | --- |
| **Description** | Test for **UC17:** Patient can view statistic graph of blood sugar. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall redirect to health plan page and dis play graph to user | The system shall redirect to health plan page and dis play graph to user | Pass |

**Table 6.45**: Test Case of **ST20:** Patient can view statistic graph of blood sugar.

#### 

#### **ST21:** Patient can get interpretation about blood sugar from system.

|  |  |
| --- | --- |
| **Description** | Test for **UC18:** Patient can get interpretation about blood sugar from system. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall redirect to health plan page and dis play recommend about blood sugar to user. | The system shall redirect to health plan page and dis play recommend about blood sugar to user. | Pass |

**Table 6.45**: Test Case of **ST21:** Patient can get interpretation about blood sugar from system.

**Feature#8: Behavior monitors system**.

#### **ST22:** Patient can select food.

|  |  |
| --- | --- |
| **Description** | Test for **UC19:** Patient can select food. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall provide list of food name to patient. | The system shall provide list of food name to patient. | Pass |
| 2 | The system shall review name of food to patient. | The system shall review name of food to patient. | Pass |

**Table 6.46**: Test Case of **ST22:** Patient can select food.

#### **ST23:** Patient can submit and view about analyze result.

|  |  |
| --- | --- |
| **Description** | Test for **UC21:** Patient can submit and view about analyze result. |
| **Test date** | July 08,2016 |
| **Test by** | Jirayu chinpongsuwan |

**Test Case:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Case** | **Expect Output** | **Actual Output** | **Pass/Fail** |
| 1 | The system shall provide analyze result to patient.. | The system shall provide analyze result to patient. | Pass |

**Table 6.47**: Test Case of **ST23:** Patient can submit and view about analyze result.