**Dental Clinic Services System**

Test Plan

By

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**Test Plan**

**Revision Table**

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**Table of Content**

**Chapter One: Introduction**

* 1. **Objectives**

Dental clinic service system is a web application and a mobile application which supports ios7. This application is support English language for the person who is the patient, the officer or the dentist of the dental clinic furthermore it allow visitor can use. This application will reduce officers’ work and do not waste patients’ time so, patient can find anything about dental clinic information or personal information and others from it. For the visitor who want to has a dental treatment from the clinic he/she can make an appointment to the dentist through the application and also the dentist can use it for checking patients’ schedule. The Dental clinic services system is gathered most of the services in the clinic into the web application and mobile application. When the application is grouping all the services together it will be uncomplicated for dental clinic user.

This Test Plan has described in more detail of each test plan and each function that needs to test. The document includes Test Plan, Test Procedures, Unit Test, and System Test.

**1.2 Purpose**

The purpose of the test plan of Dental clinic services system is to establish a plan that will be used to detect and fix any bugs or other defects that may occur in the website or the mobile application. The test plan is created to guarantee that all the defects are found before the system is released so that the software is faultless. The unit testing is to cover all of the implemented methods of Dental clinic services system and the system testing verifies all the user requirements.

**1.3 Scope**

Dental clinic services system is a website and mobile application for dental clinic’s patient. This program can reduce clinic’s officer works and convenient for patient. The dental clinic provides patientID and password for clinic’s patient use for login into the application and website.

The test plan describes the unit testing to resolve the defects in the system and describes the system testing activities for testing a completely integrated system to verify that the system meets the user requirements.

**1.4 Acronyms and Definitions**

**1.3.1 Acronyms**

Registered User = Patient, Dentist, and Officer

Non-registered User = Visitor

DCSS = Dental Clinic Services System

PMP = Project Management Plan

SDD = Software Design Document

SRS = Software Requirement Specification

SRS = Software Requirement Specification

UC = Use Case

UI = User Interface

UTC = Unit Test Case

STC = System Test Case

**1.3.2 Definitions**

Feature Transformation of input parameters to output parameters based on a specified algorithm. It describes the functionality of a produce in the language of the product. Used for requirements analysis, design, coding, testing or maintenance. [IEEE90]

Design The period of time in the software life cycle during which the designs for architecture, software component, interfaces and data are created, documented, and verified to satisfy requirements. [IEEE90]

IEEE Institute for Electrical and Electronics Engineers. Biggest global interest group for engineers of different branches and for computer scientists. [IEEE90]

Requirement (1) A condition or capability needed by a user to solve a problem or achieve an objective. (2) A condition or capability that must be met or processed by system or system component to satisfy a contract, standard, specification, or other formally imposed document. (3) A documented representation of a condition or capability as in definition (1) or (2). [IEEE90]

Specification Precise description of an activity or work product which serves as basis or input for further activities or work product. A specification can comprise requirements to a product and how they will be solved. Different parts of a specification (e.g. what is to be done, how it will be done) must not be mixed. [IEEE90]

White box testing Testing process that focus on internal structure. The tester should know the code inside the program and test it through the code and determines the appropriate outputs.

Black box testing Process, device or system that focus on input, output and transfer characteristics without knowledge about it internal structure.

Unit Testing A level of the software testing process where individual units/components of a software/system are tested. The purpose is to validate that each unit of the performs as designed.

System testing A level of the software testing process where a complete, integrated system/software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements.

**Chapter Two | Test Plan and Test Procedure**

**2.1 Test Objectives**

The objectives of testing Dental clinic services system of the web application and the mobile application project are as follows:

1. All bugs or defects are detected.
2. Those bugs or defects are fixed.
3. The system meets user's requirements.
4. All functionalities and features must are provided.

**2.2 Scope**

Dental clinic services system will be tested using white-box testing and black-box testing techniques, which are unit testing and system testing respectively. And the test results will be documented in the Test Record.

**2.3 Test Duration**

|  |  |
| --- | --- |
| **Progress** | **Date and Duration** |
| **Progress 1 report** | Perform date: 2nd June 2013 - 5th June 2014 (Unit test, System test) Duration: 3 days |
| **Progress 2 report** |  |
| **Progress 3 report** |  |
| **Final Progress report** |  |

**2.4 Test Responsibility**

|  |  |
| --- | --- |
| **Item** | **Responsibility** |
| Unit test of web application | Kanokwan & Worapun |
| Unit test of iOS mobile application | **-** |
| Record unit test of web application | Kanokwan & Worapun |
| Record unit test of iOS mobile application | Kanokwan & Worapun |
| System test of web application | Kanokwan & Worapun |
| System test of iOS mobile application | Kanokwan & Worapun |
| Record system test of web application | Kanokwan & Worapun |
| Record system test of iOS mobile application | Kanokwan & Worapun |

**2.5 Test Strategy**

Dental clinic services system testing will be performed in the following steps:

1. Design test cases for each feature.
2. Prepare test data for each feature.
3. Determine expected results.
4. Perform testing on individual feature.
5. Record the result of the testing.
6. Store all test files in the project repository.

**2.6 Result of Testing**

In the Test Record, the test result will be separated into two parts, which are:

1. Actual output: The actual outputs that are produced by each test case.

2. Pass/Fail criteria:

2.1 Pass: the actual result of the test is same as the expected result.

2.2 Fail: the actual result of the test is not same as the expected result.

**2.7 Test Environment**

**2.7.1 Hardware**

* **Computer**
* **Dell Inspiron N4110**

**Processor:** Intel(R) Core(TM) i3-2310M CPU@ 2.10GHz, 2.10 GHz

**Memory:** 6.00 GB

**Operating system:** Window 7 Ultimate

* **Sony VAIO SVE14118FHB**

**Processor:** Intel(R) Core(TM) i7-3612QM CPU@ 2.10GHz, 2.10 GHz

**Memory:** 8.00 GB

**Operating system:** Windows 7 Home Premium

* **MacBook Pro**

**Processor:** 2.5 GHz Intel Core i5

**Memory:** 4 GB 1600 MHz DDR38.00 GB

**Operating system:** W OS X 10.9.2 (13C1021)

* **iPhone**
* **iPhone 5s**

**Processor:** Dual core, 1300 MHz

**Memory:** 32 GB internal storage, 1 GB RAM DDR3

**Operating** System: iOS7

**2.7.2 Software**

* Google Chrome Version 19.0 or later
* HTML version 5
* PHP editor Version 5
* Xcode version 5.1.1
* Codeigniter framework version 2.1.4
* Phonegap version 3.0
* Ios operating system version ios7
* Adobe Dreamweaver CC
* Zxing qr code generater

**Chapter Three | Unit Testing of LCR Web Application**

**Class:** Patient\_manage

**Unit Test Case 01 (UTC-01):** testp\_login()

**Description:**

Test the login function of patient in class Patient\_manage by input patientID and password.

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_user\_1 | Varchar | xxxx |
| $in\_pass\_1 | Varchar | xxxx |
| $in\_user\_2 | Varchar | P0003 |
| $in\_pass\_2 | Varchar | 1234 |

**Test Case:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Remark** | **Expected** |
| **patientID** | **password** |
| **1** | Test login in false case with no registered patientID and password | $in\_user\_1 | $in\_pass\_1 | - | false |
| **2** | Test login in true case with registered patientID and password | $in\_user\_2 | $in\_pass\_2 | - | true |

**Unit Test Case 02 (UTC-02):** testp\_ownCalendar()

**Description:**

Test the function of patient which can display their own calendar and get patients’ schedule from patientID

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id1 | Varchar | xxxx |
| $in\_id2 | Varchar | 1 |
| $expResult1 | Array | null |
| $expResult2 | Array | [appointmentID] => 1 [patientID] => 1 [userID] => test [aDate] => 2014-06-08 [startTime] => 13:00:00 [endTime] => 13:30:00 [treatment] => Bridge [description] => - [submit] => null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **patientID** |
| **1** | Test own calendar in false case with no registered patientID | $in\_id1 | - | $expResult1 |
| **2** | Test own calendar in true case with registered patientID | $in\_id2 | - | $expResult2 |

**Class:** Dentist\_manage

**Unit Test Case 03 (UTC-03):** testd\_login()

**Description:**

Test the login function of dentist in class Dentist\_manage by input userID and password.

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_user\_1 | Varchar | xxxx |
| $in\_pass\_1 | Varchar | xxxx |
| $in\_user\_2 | Varchar | test |
| $in\_pass\_2 | Varchar | 1234 |

**Test Case:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Remark** | **Expected** |
| **patientID** | **password** |
| **1** | Test login in false case with no registered userID and password | $in\_user\_1 | $in\_pass\_1 | - | false |
| **2** | Test login in true case with registered userID and password | $in\_user\_2 | $in\_pass\_2 | - | true |

**Unit Test Case 04 (UTC-04):** testd\_ownCalendar()

**Description:**

Test the function of patient which can display their own calendar and get dentists’ schedule from userID

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id1 | Varchar | xxxx |
| $in\_id2 | Varchar | dent001 |
| $expResult1 | Array | null |
| $expResult2 | Array | [appointmentID] => 8 [patientID] => P0001 [userID] => dent001 [aDate] => 2014-06-17 [startTime] => 14:00:00 [endTime] => 15:00:00 [treatment] => clean [description] => 300 thb [submit] => null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **userID** |
| **1** | Test own calendar in false case with no registered patientID | $in\_id1 | - | $expResult1 |
| **2** | Test own calendar in true case with registered patientID | $in\_id2 | - | $expResult2 |

**Class:** Officer\_manage

**Unit Test Case 05 (UTC-05):** testo\_login()

**Description:**

Test the login function of dentist in class Officer\_manage by input userID and password.

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_user\_1 | Varchar | xxxx |
| $in\_pass\_1 | Varchar | xxxx |
| $in\_user\_2 | Varchar | admin |
| $in\_pass\_2 | Varchar | 1234 |

**Test Case:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Remark** | **Expected** |
| **patientID** | **password** |
| **1** | Test login in false case with no registered userID and password | $in\_user\_1 | $in\_pass\_1 | - | false |
| **2** | Test login in true case with registered userID and password | $in\_user\_2 | $in\_pass\_2 | - | true |

**Unit Test Case 06 (UTC-06):** testget\_p\_db()

**Description:**

Test the function of get patients’ account data from database to view as a list

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $expResult2 | Array[0] | [patientID] => P0001 [password] => 1234 [Firstname] => xxxx [Surname] => xxxx [Age] => 33 [Gender] => 2 [Treatment] => xxx [Address] => xxxx [Tel] => 0000000000 [Email]=> xxxx@xxx.com [submit]=>null |
| Array[1] | [patientID] => P0002 [password] => 1234 [Firstname] => xxxx [Surname] => xxxx [Age] => 23 [Gender] => 2 [Treatment] => xxx [Address] => xxxx [Tel] => 0000000000 [Email]=> xxxx@xxx.com [submit]=>null |
| Array[2] | [patientID] => P0003 [password] => 1234 [Firstname] => xxxx [Surname] => xxxx [Age] => 23 [Gender] => 2 [Treatment] => xxx [Address] => xxxx [Tel] => 0000000000 [Email]=> xxxx@xxx.com [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test view all patient list | - | - | $expResult |

**Unit Test Case 07 (UTC-07):** testget\_db()

**Description:**

Test the function of get clinic users’ account data from database to view as a list

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $expResult | Array[0] | [userID] => test [role] => 0 [password] => 1234 [f\_name] => aaaa [l\_name] => xxxx [address] => xxxx [email] => xxxx@xxx.com [telNum] => 0000000000 [submit]=>null |
| Array[1] | [userID] => admin [role] => admin [password] => 1234 [f\_name] => xxxx [l\_name] => xxxx [address] => xxxx [email] => xxxx@xxx.com [telNum] => 0000000000 [submit]=>null |
| Array[2] | [userID] => dent001 [role] => 0 [password] => 1234 [f\_name] => dddd [l\_name] => dddd [address] => dddd [email] => dddd@ddd.com [telNum] => 1111111111 [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test view all clinic user list | - | - | $expResult |

**Unit Test Case 08 (UTC-08):** testp\_register()

**Description:**

Test register for patient function by officer and input all required data

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $data | Array | [patientID] => P0004 [password] => 1234 [Firstname] => Paula [Surname] => Abdul [Age] => 44 [Gender] => 2 [Treatment] => Whitening [Address] => 199 sun st., Honolulu, Hawaii, USA [Tel] => 111111111 [Email]=> paula.a@aloha.com [submit]=>submit |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test register for patient | $data | - | true |

**Unit Test Case 09 (UTC-09):** testp\_edit()

**Description:**

Test patient edit function to see that system can retrieve data from database correctly or not

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | P0000 |
| $in\_id\_2 | Varchar | P0001 |
| $expResult1 | Array | Null |
| $expResult2 | Array | [patientID] => P0001 [password] => 1234 [Firstname] => xxxx [Surname] => xxxx [Age] => 33 [Gender] => 2 [Treatment] => xxx [Address] => xxxx [Tel] => 0000000000 [Email]=> xxxx@xxx.com [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test call patient edit page with not exist patientID | $in\_id\_1 | - | $expResult1 |
| **2** | Test call patient edit page with exist patientID | $in\_id\_2 | - | $expResult2 |

**Unit Test Case 10 (UTC-10):** testp\_delete()

**Description:**

Test function for delete patient from database by input an patientID

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | Null |
| $in\_id\_2 | Varchar | 0 |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test delete patient from database with no patientID | $in\_id\_1 | - | false |
| **2** | Test delete patient from database with patientID | $in\_id\_2 | - | true |

**Unit Test Case 11 (UTC-11):** testd\_register()

**Description:**

Test register for dentist function by officer and input all required data

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $data | Array | [userID] => dent002 [role] => dentist [password] => 1234 [f\_name] => dent [l\_name] => tist [address] => clinic [telNum] => 0000000000 [email] => dentist.t@clinic.com [submit]=>submit |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test register for dentist | $data | - | true |

**Unit Test Case 12 (UTC-12):** testd\_edit()

**Description:**

Test dentist edit function to see that system can retrieve data from database correctly or not

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | D0000 |
| $in\_id\_2 | Varchar | test |
| $expResult1 | Array | Null |
| $expResult2 | Array | [userID] => test [role] => 0 [password] => 1234 [f\_name] => aaaa [l\_name] => xxxx [address] => xxxx [telNum] => 0000000000 [email] => xxxx@xxx.com [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test call dentist edit page with not exist userID | $in\_id\_1 | - | $expResult1 |
| **2** | Test call dentist edit page with exist userID | $in\_id\_2 | - | $expResult2 |

**Unit Test Case 13 (UTC-13):** testd\_delete()

**Description:**

Test function for delete dentist from database by input userID

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | Null |
| $in\_id\_2 | Varchar | 0 |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test delete dentist from database with no userID | $in\_id\_1 | - | false |
| **2** | Test delete dentist from database with userID | $in\_id\_2 | - | true |

**Unit Test Case 14 (UTC-14):** testview\_appointment()

**Description:**

Test the function of get all appointment data from database to view as a list

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $expResult | Array[0] | [appointmentID] => 1 [patientID] => 1 [userID] => test [aDate] => 2014-06-08 [startTime] => 13:00:00 [endTime] => 13:30:00 [treatment] => Bridge [description] => - [submit]=>null |
| Array[1] | [appointmentID] => 2 [patientID] => P0003 [userID] => test [aDate] => 2014-06-09 [startTime] => 16:15:00 [endTime] => 16:45:00 [treatment] => Zeppline [description] => - [submit]=>null |
| Array[2] | [appointmentID] => 15 [patientID] => P0004 [userID] => test [aDate] => 2014-07-09 [startTime] => 22:00:00 [endTime] => 23:00:00 [treatment] => aaaa [description] => aaaa [submit]=>null |
|  | Array[3] | [appointmentID] => 8 [patientID] => P0001 [userID] => dent001 [aDate] => 2014-06-17 [startTime] => 14:00:00 [endTime] => 15:00:00 [treatment] => clean [description] => 300 thb [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test view all appointment list | - | - | $expResult |

**Unit Test Case 15 (UTC-15):** testmake\_appointment()

**Description:**

Test make appointment function by officer and input all required data

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $data | Array | [patientID] => P0002 [userID] => dent001 [aDate] => 2014-07-04 [startTime] => 13:00:00 [endTime] => 13:30:00 [treatment] => Whitening [description] => 4500 THB [submit] => submit |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test register for dentist | $data | - | true |

**Unit Test Case 16 (UTC-16):** testapp\_edit()

**Description:**

Test appointment edit function to see that system can retrieve data from database correctly or not

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | 3 |
| $in\_id\_2 | Varchar | 2 |
| $expResult1 | Array | Null |
| $expResult2 | Array | [appointmentID] => 2 [patientID] => P0003 [userID] => test [aDate] => 2014-06-09 [startTime] => 16:15:00 [endTime] => 16:45:00 [treatment] => Zeppline [description] => - [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test call appointment edit page with not exist userID | $in\_id\_1 | - | $expResult1 |
| **2** | Test call appointment edit page with exist userID | $in\_id\_2 | - | $expResult2 |

**Unit Test Case 17 (UTC-17):** testapp\_delete()

**Description:**

Test function for delete appointment from database by input appointmentID

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | Null |
| $in\_id\_2 | Varchar | 22 |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test delete appointment from database with no appointment ID | $in\_id\_1 | - | false |
| **2** | Test delete appointment from database with appointment ID | $in\_id\_2 | - | true |

**Unit Test Case 17 (UTC-17):** testPatientCalendar()

**Description:**

Test view patients’ appointment function with specific appointmentID to see that system can retrieve data from database correctly or not

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | P0002 |
| $in\_id\_2 | Varchar | P0001 |
| $expResult1 | Array | null |
| $expResult2 | Array | [appointmentID] => 8 [patientID] => P0001 [userID] => dent001 [aDate] => 2014-06-17 [startTime] => 14:00:00 [endTime] => 15:00:00 [treatment] => clean [description] => 300 thb [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test call patients’ appointment edit page with not exist patientID | $in\_id\_1 | - | $expResult1 |
| **2** | Test call patients’ appointment edit page with exist patientID | $in\_id\_2 | - | $expResult2 |

**Unit Test Case 19 (UTC-19):** testDentistCalendar()

**Description:**

Test view dentists’ appointment function with specific appointmentID to see that system can retrieve data from database correctly or not

**Test Data:**

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Parameter type** | **Value** |
| $in\_id\_1 | Varchar | dent002 |
| $in\_id\_2 | Varchar | dent001 |
| $expResult1 | Array | null |
| $expResult2 | Array | [appointmentID] => 8 [patientID] => P0001 [userID] => dent001 [aDate] => 2014-06-17 [startTime] => 14:00:00 [endTime] => 15:00:00 [treatment] => clean [description] => 300 thb [submit]=>null |

**Test Case:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Remark** | **Expected** |
| **1** | Test call dentists’ appointment edit page with not exist userID | $in\_id\_1 | - | $expResult1 |
| **2** | Test call dentists’ appointment edit page with exist userID | $in\_id\_2 | - | $expResult2 |

**Chapter Four: System Testing**

**4. System testing**

**System Test Case 01(STC-01):** Patient can login into the websites

**Description:**

To test the login function of patient that can login to the website with correct username and password and cannot login to the website if there are wrong username or password

**Test script:**

1. Login to the website select login function.
2. Login user input patientID and password in login form.
3. Select login button.
4. The system shall validate the id and password.
5. The system shall provide index page if id and password are correct.
6. The system shall provide alert message if id and password are incorrect.

**Data needs:** Table patient

|  |  |
| --- | --- |
| patientID | patient |
| password | 1234 |
| Firstname | xxxx |
| Lastname | xxxx |
| Age | 21 |
| Gender | 1 |
| Treatment | xxxx |
| Address | xxxx |
| Tel | 0800000000 |
| Email | xxxx@xxx.com |

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test login with correct patientID and password | patient | 1234 | System shall provide redirect to index page |
| 2 | Test login with wrong patientID and password | xxxx | xxxx | System shall provide dialog blog “Invalid patientID or password” |
| 3 | Test login with empty fields | - | - | System shall provide dialog blog “Please fill out this field ” |

**System Test Case 02(STC-02):** Patient can login into the mobile application

**Description:**

To test the login function of patient that can login to the mobile application with correct username and password and cannot login to the mobile application if there are wrong username or password

**Test script:**

1. Login to the mobile application select login function.
2. Login user input patientID and password in login form.
3. Select login button.
4. The system shall validate the id and password.
5. The system shall provide index page if id and password are correct.
6. The system shall provide alert message if id and password are incorrect.

**Data needs:** Table patient

|  |  |
| --- | --- |
| patientID | patient |
| password | 1234 |
| Firstname | xxxx |
| Lastname | xxxx |
| Age | 21 |
| Gender | 1 |
| Treatment | xxxx |
| Address | xxxx |
| Tel | 0800000000 |
| Email | xxxx@xxx.com |

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test login with correct patientID and password | patient | 1234 | System shall provide dialog blog “You’re login” |
| 2 | Test login with wrong patientID and password | xxxx | xxxx | System shall provide dialog blog “Your login fail” |
| 3 | Test login with empty fieeds | - | - | System shall provide dialog blog “You must enter patientID and password” |

**System Test Case 03(STC-03):** Patient can view all appointments as a calendar in the website

**Description:**

To test the view calendar appointment function of user to view all appointment in the website without login

**Test script:**

1. User select calendar appointment function
2. The system shall provide appointment schedule in appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view calendar appointment | Localhost/CI/index.php/Patient\_Controller/callCalendar | System shall provide calendar with all appointment in appointment page |
| 2 | Test view calendar appointment | Click view calendar appointment function | System shall provide calendar with all appointment in appointment page |
| 3 | Test view calendar appointment with login | Input patientID “patient” and password “1234” | System shall provide calendar with all appointment in appointment page |

**System Test Case 04(STC-04):** Patient can view all appointments as a calendar in mobile application

**Description:**

To test the view calendar appointment function in mobile application of user to view all appointment in the appointment page without login

**Test script:**

1. User select calendar function
2. The system shall provide calendar appointment in appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view calendar appointment | Click view calendar appointment function | System shall provide calendar appointment in appointment page |
| 2 | Test view calendar appointment with login | Input patientID “patient” and password “1234” | System shall provide calendar with all appointment in appointment page |

**System Test Case 05(STC-05):** Patient can view his/her appointment schedule in the website

**Description:**

To test the view appointment function of user to view his/her patients’ appointment schedule in the appointment page and login is required

**Test script:**

1. User login to the website by using patientID and password
2. System shall provide the index page after login success
3. User select appointment function
4. The system shall provide appointment schedule in appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test view his/her appointment schedule with correct patientID and password | patient | 1234 | System shall provide appointment schedule to patient whose patientID is “patient” |
| 2 | Test view his/her appointment schedule with wrong patientID and password | xxxx | xxxx | System does not provide appointment schedule to patient whose patientID is “xxxx” |
| 3 | Test view his/her appointment schedule with empty patientID and password fields | - | - | System does not provide appointment schedule to patient |
| 4 | Test view his/her appointment schedule without login | - | - | System does not provide appointment schedule to patient |

**System Test Case 06(STC-06):** Patient can view his/her appointment schedule in the mobile application

**Description:**

To test the view appointment function of user to view his/her patients’ appointment schedule in the appointment page and login is required

**Test script:**

1. User login to the mobile application by using patientID and password
2. System shall provide the index page after login success
3. User select appointment function
4. The system shall provide appointment schedule in appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test view his/her appointment schedule with correct patientID and password | patient | 1234 | System shall provide appointment schedule to patient whose patientID is “patient” |
| 2 | Test view his/her appointment schedule with wrong patientID and password | xxxx | xxxx | System does not provide appointment schedule to patient whose patientID is “xxxx” |
| 3 | Test view his/her appointment schedule with empty patientID and password fields | - | - | System does not provide appointment schedule to patient |
| 4 | Test view his/her appointment schedule without login | - | - | System does not provide appointment schedule to patient |

**System Test Case 07(STC-07):** Patient can logout from the website

**Description:**

To test the logout from the website

**Test script:**

1. User select logout function
2. The system shall provide index page without the patientID on the index page

**Data needs:**

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test logout with patientID and password | patient | 1234 | System shall redirect to the index page and does not show the patientID in any page after logout |

**System Test Case 08(STC-08):** Patient can logout from the mobile application

**Description:**

To test the logout from mobile application

**Test script:**

1. User select logout function
2. The system shall provide index page without the patientID on the index page

**Data needs:**

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test logout with patientID and password | patient | 1234 | System shall redirect to the index page and does not show the patientID in any page after logout |

**System Test Case 09(STC-09):** Officer can login into the websites

**Description:**

To test the login function of officer that can login to the website with correct username and password and cannot login to the website if there are wrong username or password

**Test script:**

1. Login to the website select login function.
2. Login user input userID and password in login form.
3. Select login button.
4. The system shall validate the id and password.
5. The system shall provide index page if id and password are correct.
6. The system shall provide alert message if id and password are incorrect.

**Data needs:** Table clinic\_user

|  |  |
| --- | --- |
| userID | admin |
| password | 1234 |
| Firstname | xxxx |
| Lastname | xxxx |
| Age | 21 |
| Gender | 1 |
| Treatment | xxxx |
| Address | xxxx |
| Tel | 0800000000 |
| Email | xxxx@xxx.com |

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **adminID** | **password** |
| 1 | Test login with correct userID and password | admin | 1234 | System shall provide redirect to index page |
| 2 | Test login with wrong userID and password | xxxx | xxxx | System shall provide dialog blog “Invalid userID or password” |
| 3 | Test login with empty fields | - | - | System shall provide dialog blog “Please fill out this field ” |

**System Test Case 10(STC-10):** Officer can logout from website

**Description:**

To test the logout from the website

**Test script:**

1. User select logout function
2. The system shall provide index page without the userID on the index page

**Data needs:**

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **adminID** | **password** |
| 1 | Test logout with userID and password | admin | 1234 | System shall redirect to the index page and does not show the userID in any page after logout |

**System Test Case 11(STC-11):** Officer can create patient account

**Description:**

Test the patient register function of officer that can register for new patient.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select create patient account function
4. User input patients’ information that includes patientID,password,firstname,surname,age,gender,address,tel.,email,treatment
5. User save patients’ information
6. System shall redirect to the patient list page after creating account success

**Data needs:** Table patient

|  |  |
| --- | --- |
| patientID |  |
| password |  |
| Firstname |  |
| Lastname |  |
| Age |  |
| Gender |  |
| Treatment |  |
| Address |  |
| Tel |  |
| Email |  |

**Test Cases:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | | | | | | | | **Expected** |
| **patientID** | **password** | **Fisrtname** | **Surname** | **Age** | **Treatment** | **Address** | **Tel** | **Email** |
| 1 | Test create patient account with correct form | patient | 1234 | Mickey | Mouse | 80 | Tooth braces | Chaingmai,Thailand | 053xxxxxx | M.ky@hotmail.com | System shall redirect to the patient list page and show account information whose patientID is “patient” |
| 2 | Test create account with duplicate patientID | patient | xxxx | Minnie | Mouse | 80 | Tooth braces | Chaingmai,Thailand | 091xxxxxxx | Minnie.M@hotmail.com | System does not redirect to patient list page |
| 3 | Test create account with empty fields | - | - | - | - | - | - | - | - | - | System shall provide dialog blog “Please fill out this field” |

**System Test Case 12(STC-12):** Officer can view patient list in the patients’ schedule

**Description:**

Test officer can view patient list in the patient s’ schedule.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select patient list page
4. System shall redirect to the patient list in patient list page

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view patient list in the patients’ schedule | Localhost/CI/index.php/Officer\_Controller/get\_p\_db | System shall provide patients’ schedule in the patient list page |
| 2 | Test view patient list in the patients’ schedule | Click view patient list function | System shall provide patients’ schedule in the patient list page |
| 3 | Test view patient list in the patients’ schedule without login | - | System does not provide patients’ schedule in the patient list page |

**System Test Case 13(STC-13):** Officer can create dentist account

**Description:**

Test the dentist register function of officer that can register for new dentist.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select create dentist account function
4. User input dentists’ information that includes dentisttID,password,firstname,surname,age,gender,address,tel.,email
5. User save dentists’ information
6. System shall redirect to the dentist list page after creating account success

**Data needs:** Table clinic\_user

|  |  |
| --- | --- |
| userID |  |
| role |  |
| password |  |
| f\_name |  |
| l\_name |  |
| Address |  |
| Email |  |
| telNum |  |

**Test Cases:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | | | | | | | **Expected** |
| **userID** | **role** | **password** | **f\_name** | **l\_name** | **Address** | **Email** | **telNum** |
| 1 | Test create dentist account with correct form | D001 | dentist | 1234 | Donald | Duck | Chaingmai,Thailand | DD@hotmail.com | 081xxxxxxx | System shall redirect to the dentist list page and show account information whose userID is “D001” |
| 2 | Test create account with duplicate userID | D001 | dentist | 1234 | Daisy | Duck | Chaingmai,Thailand | Dsy@hotmail.com | 085xxxxxxx | System does not redirect to dentist list page |
| 3 | Test create account with empty fields | - | - | - | - | - | - | - |  | System shall provide dialog blog “Please fill out this field” |

**System Test Case 14(STC-14):** Officer can view dentist list in the dentists’ schedule

**Description:**

Test officer can view dentist list in the dentists’ schedule.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select dentist list page
4. System shall redirect to the dentist list in dentist list page

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view dentist list in the patients’ schedule | Localhost/CI/index.php/Officer\_Controller/get\_d\_db | System shall provide dentists’ schedule in the dentist list page |
| 2 | Test view dentist list in the dentistts’ schedule | Click view dentist list function | System shall provide dentists’ schedule in the dentist list page |
| 3 | Test view patient list in the patients’ schedule without login | - | System does not provide dentists’ schedule in the dentist list page |

**System Test Case 15(STC-15):** Officer can edit patient account

**Description:**

Tests edit patient function that can change/edit patients’ information.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select patient list page
4. User select edit function
5. User edit patient information and save
6. System shall redirect to patient list page after edit success

**Data needs:** Table patient

|  |  |
| --- | --- |
| patientID: | patient |
| Password: | 1234 |
| Firstname: | Mickey |
| Lastname: | Mouse |
| Age: | 80 |
| Gender: | Male |
| Treatment: | Tooth braces,tooth zeplin |
| Address: | Chaingmai Thailand |
| Tel: | 053xxxxxx |
| Email: | M.ky@hotmail.com |

**Test Case:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | | | | | | | | **Expected** |
| **patientID** | **password** | **Fisrtname** | **Surname** | **Age** | **Treatment** | **Address** | **Tel** | **Email** |
| 1 | Test edit patient account with correct form | patient | 1234 | Mickey | Mouse | 80 | Tooth braces, ,tooth zeplin | Chaingmai,Thailand | 053xxxxxx | M.ky@hotmail.com | System shall redirect to the patient list page and show new account information that has edited already, whose patientID is “patient” |
| 2 | Test edit account with duplicate patientID | patient | xxxx | Minnie | Mouse | 80 | Tooth braces | Chaingmai,Thailand | 091xxxxxxx | Minnie.M@hotmail.com | System does not redirect to patient list page |
| 3 | Test edit account with empty fields | - | - | - | - | - | - | - | - | - | System shall provide dialog blog “Please fill out this field” |

**System Test Case 16(STC-16):** Officer can delete patients’ account

**Description:**

Test deleting patient account that will remove information from the database.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select patient list page
4. User select delete function
5. System shall redirect to patient list page after delete success

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test delete patients’ account | Localhost/CI/index.php/Officer\_Controller/get\_p\_db/Patient/patient/delete | System shall provide patients’ schedule in patient list page without patient whose patientID is “patient” |
| 2 | Test delete patients’ account | Click view delete function at patientID that want to delete | System shall provide patients’ schedule in patient list page without patient whose patientID is “patient” |
| 3 | Test delete patients’ account | - | System does not provide patients’ schedule in the patient list page |

**System Test Case 17(STC-17):** Officer can edit dentists’ information

**Description:**

Test the edit dentist function that can change/edit dentists’ information.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select dentist list page
4. User select edit function
5. User edit dentist information and save
6. System shall redirect to dentist list page after edit success

**Data needs:** clinic\_user table

|  |  |
| --- | --- |
| userID: | D001 |
| Role: | Dentist |
| Password: | 1234 |
| F\_name: | Donald |
| L\_name: | Duck |
| Address: | Chaingmai Thailand |
| Email: | DD@gmail.com |
| TelNum: | 081xxxxxxx |

**Test Cases:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | | | | | | | **Expected** |
| **userID** | **role** | **password** | **f\_name** | **l\_name** | **Address** | **Email** | **telNum** |
| 1 | Test edit dentists’ account | D001 | Dentist | 1234 | Donald | Duck | NewYork,USA | DD@hotmail.com | 081xxxxxxx | System shall redirect to the dentist list page and show new account information that has edited already, whose userID is “D001” |
| 2 | Test create account with duplicate userID | D001 | dentist | 1234 | Daisy | Duck | Chaingmai,Thailand | Dsy@hotmail.com | 085xxxxxxx | System does not redirect to dentist list page |
| 3 | Test create account with empty fields | - | - | - | - | - | - | - |  | System shall provide dialog blog “Please fill out this field” |

**System Test Case 18(STC-18):** Officer can delete dentists’ account

**Description:**

Test deleting dentist account that will remove information from the database.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select dentist list page
4. User select delete function
5. System shall redirect to patient list page after delete success

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test delete dentists’ account | Localhost/CI/index.php/Officer\_Controller/get\_d\_db/Dentist/D001/delete | System shall provide dentists’ schedule in dentist list page without dentist whose userID is “D001” |
| 2 | Test delete dentists’ account | Click view delete function at patientID that want to delete | System shall provide dentists’ schedule in dentist list page without dentist whose userID is “D001” |
| 3 | Test delete dentists’ account | - | System does not provide dentists’ schedule in the dentist list page |

**System Test Case 19(STC-19):** Officer can make an appointment

**Description:**

Test the make appointment function of officer.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select make an appointment function
4. User input appointment information includes patientID,dentistID,starttime,endtime,date,description
5. User savean appointment
6. System shall redirect to appointment page after add appointment success

**Data needs:** google emails’ account of dental clinic

**Test Cases:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | | | | | | **Expected** |
| **patientID** | **userID** | **date** | **startTime** | **endTime** | **Treatment** | **Description** |  |
| 1 | Test create new appointment with correct | patient | D001 | 01/07/2014 | 09.30 AM | 10.30 AM | Change brances | 100 baht/once | System shall redirect to appointment schedule page and display this appointment in the list |
| 2 | Test create new appointment with duplicate time/date/ and dentist | patient | D001 | 01/07/2014 | 09.30 AM | 10.30 AM | Change brances | 100 baht/once | System does not redirect to appointment schedule page |
| 3 | Test create new appointment with empty fields | - | - | - | - | - | - | - | System shall provide dialog blog “Please fill out this field” |

**System Test Case 20(STC-20):** Officer can view all appointments as a calendar in the website

**Description:**

To test the view all appointment function of user to view the appointment schedule in the appointment page without login

**Test script:**

1. User select appointment function
2. The system shall provide appointment schedule in appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view all appointment as a calendar | Localhost/CI/index.php/Officert\_Controller/callCalendar | System shall provide calendar with all appointment in appointment page |
| 2 | Test view all appointment as a calendar | Click view calendar appointment function | System shall provide calendar with all appointment in appointment page |
| 3 | Test view all appointment as a calendar | Input userID “admint” and password “1234” | System shall provide calendar with all appointment in appointment page |

**System Test Case 21(STC-21):** Officer can edit an appointment

**Description:**

Test the edit appointment function of officer.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select appointment page
4. User select edit function
5. User edit appointment information and save
6. System shall redirect to appointment page after edit appointment success

**Data needs:** google emails’ account of dental clinic

**Test Cases:**

**Test Cases:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | | | | | | **Expected** |
| **patientID** | **userID** | **date** | **startTime** | **endTime** | **Treatment** | **Description** |  |
| 1 | Test edit an appointment with correct form | patient | D002 | 01/07/2014 | 09.30 AM | 10.30 AM | Change brances | 100 baht/once | System shall redirect to appointment schedule page and display this appointment in the list |
| 2 | Test edit appointment with duplicate time/date/ and dentist | patient | D002 | 03/07/2014 | 09.30 AM | 10.30 AM | Change brances | 100 baht/once | System does not redirect to appointment schedule page |
| 3 | Test edit appointment with empty fields | - | - | - | - | - | - | - | System shall provide dialog blog “Please fill out this field” |

**System Test Case 22(STC-22):** Officer can delete an appointment

**Description:**

Test the delete appointment function of officer.

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select appointment page function
4. User select delete function
5. System shall redirect to appointment page after delete appointment success

**Data needs:** google emails’ account of dental clinic

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test delete an appointment | Localhost/CI/index.php/Officer\_Controller/view\_appointment/delete/patient | System shall provide appointment schedule in appointment page without the appointment which is selected |
| 2 | Test delete an appointment | Click delete function at the appointment that want to delete | System shall provide appointment schedule in appointment page without the appointment which is selected” |
| 3 | Test delete an appointment | - | System does not provide appointment schedule in the appointment page |

**System Test Case 23(STC-23):** Officer can save appointment into google calendar

**Description:**

To test the save appointment to google calendar function with correct appointments’ information and display in google calendar which is provide in the website

**Data needs:** Table clinic\_user

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test save appointment to google calendar | Click save to google calendar function | System shall provide google calendar and click save for saving  The saving appointment will display in the calendar appointment in DCSS website |

**System Test Case 24(STC-24):** Dentist login to the website

**Description:**

To test the login function of dentist that can login to the website with correct username and password and cannot login to the website if there are wrong username or password

**Test script:**

1. Login to the website select login function.
2. Login user input userID and password in login form.
3. Select login button.
4. The system shall validate the id and password.
5. The system shall provide index page if id and password are correct.
6. The system shall provide alert message if id and password are incorrect.

**Data needs:** Table clinic\_user

|  |  |
| --- | --- |
| userID | dentist |
| role | dentist |
| password | 1234 |
| f\_name | xxxx |
| l\_name | xxxx |
| telNum | 0811111111 |

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test login with correct userID and password | dentist | 1234 | System shall provide redirect to index page |
| 2 | Test login with wrong userID and password | xxxx | xxxx | System shall provide dialog blog “Invalid usertID or password” |
| 3 | Test login with empty fields | - | - | System shall provide dialog blog “Please fill out this field ” |

**System Test Case 25(STC-25):** Dentist logout from the website

**Description:**

Test the logout function of dentist.

1. User select logout function
2. The system shall provide index page without the userID on the index page

**Data needs:**

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **adminID** | **password** |
| 1 | Test logout with userID and password | dentist | 1234 | System shall redirect to the index page and does not show the userID in any page after logout |

**System Test Case 26(STC-26):** Dentist can view the all appointments as a calendar in the website

**Description:**

Test the view all appointment schedule function of dentist.

**Test script:**

1. User select appointment function
2. The system shall provide appointment schedule in appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view all appointment as a calendar | Localhost/CI/index.php/Dentist\_Controller/callCalendar | System shall provide calendar with all appointment in appointment page |
| 2 | Test view all appointment as a calendar | Click view calendar appointment function | System shall provide calendar with all appointment in appointment page |
| 3 | Test view all appointment as a calendar | Input userID “dentist” and password “1234” | System shall provide calendar with all appointment in appointment page |

**System Test Case 27(STC-27):** Dentist can view his/her dentists’ appointment schedule

**Description:**

To test the view appointment function of user to view his/her dentists’ appointment schedule in the appointment page and login is required

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select appointment function
4. The system shall provide appointment schedule in appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Description** | **Input** | | **Expected** |
| **patientID** | **password** |
| 1 | Test view his/her appointment schedule with correct userID and password | dentist | 1234 | System shall provide appointment schedule to dentist whose userID is “dentist” |
| 2 | Test view his/her appointment schedule with wrong userID and password | xxxx | xxxx | System does not provide appointment schedule to dentist whose userID is “xxxx” |
| 3 | Test view his/her appointment schedule with empty userID and password fields | - | - | System does not provide appointment schedule to patient |
| 4 | Test view his/her appointment schedule without login | - | - | System does not provide appointment schedule to dentist |

**System Test Case 28(STC-28):** Officer can view all appointments list in the website

**Description:**

To test the view appointment function to display all appointment lists in schedule and login is required

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select appointment function
4. The system shall provide appointment list in schedule appointment page

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view all appointment list in website | Localhost/CI/index.php/Officer\_Controller/callAppointment | System shall provide calendar with all appointment list in schedule in appointment page |
| 2 | Test view all appointment as a calendar | Click view appointment menu | System shall provide calendar with all appointment list in schedule in appointment page |

**System Test Case 29(STC-29):** Officer can view patients’ own appointment list

**Description:**

To test the view patients’ own appointment list to display patients’ account that is officer select patientID from patient list page

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select patient list menu
4. The system shall all patient list account in the page
5. User select one patientID form patient list page
6. System shall provide patients’ appointment whose patientID was selected

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view patients’ own appointment list | Click patientID “patient” | System shall provide patients’ appointment information |
| 2 | Test view patients’ own appointment list | Localhost/CI/index.php/Officer\_Controller/callAppointment/patient | System shall provide patients’ appointment information |

**System Test Case 30(STC-30):** Officer can view dentists’ own appointment list

**Description:**

To test the view dentists’ own appointment list to display dentists’ account that is officer select userID from dentist list page

**Test script:**

1. User login to the website by using userID and password
2. System shall provide the index page after login success
3. User select dentist list menu
4. The system shall all dentist list account in the page
5. User select one userID form dentist list page
6. System shall provide dentists’ appointment whose userID was selected

**Data needs:**

**Test Cases:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Input** | **Expected** |
| **Path** |
| 1 | Test view dentists’ own appointment list | Click userID “D001” | System shall provide dentists’ appointment information |
| 2 | Test view dentists’ own appointment list | Localhost/CI/index.php/Dentist\_Controller/callAppointment/Doo1 | System shall provide dentists’ appointment information |