Testing plan

Group list:​

Ng Ka Yu 13329549​

Lam Hon Pan 13080592​

Chan Hon Sum 13327427​

Wen Ka Po Paul 12722976​

Mou Cheuk Him 12663529

Contents

[Functional requirement 2](#_Toc153107008)

[Non-Functional requirement 3](#_Toc153107009)

[Validation testing 4](#_Toc153107010)

[Test case 1 4](#_Toc153107011)

[Test case 2 4](#_Toc153107012)

[Test case 3 5](#_Toc153107013)

[Test case 4 5](#_Toc153107014)

[Test case 5 6](#_Toc153107015)

[Defect testing 7](#_Toc153107016)

[Test case 6 7](#_Toc153107017)

[Test case 7 8](#_Toc153107018)

[Test case 8 8](#_Toc153107019)

[Test case 9 9](#_Toc153107020)

[Test case 10 9](#_Toc153107021)

# Functional requirement

|  |  |  |
| --- | --- | --- |
| Requirement ID | Feature | Description |
| R1 | Login | Software can verify user ID and password to login the system. |
| R2 | User verification | Software can verify what your accessibility level for going to different screen. |
| R3 | Password lock | When a user enters the wrong password 3 times it will not allow user to login this account again. Until it is unlocked by the admin. |
| R4 | Password changeable | This is a button for user to change their password if they are forgetting their password. |

|  |  |  |
| --- | --- | --- |
| R5 | data search | This function can find personal information in the database. |
| R5.1 |  | In admin access level it can get all student and teacher information. |
| R5.2 |  | In teacher access level it can get their own personal information, registered course list, registered student information and student’s academic result. |
| R5.3 |  | In student access level it can get their course list, personal information and their academic result. |
| R6 | Data update | This function able different accessibility level the update, remove and insert data. |
| R6.1 |  | In admin access level it can update, remove and insert teacher and student all data. |
| R6.2 |  | In teacher access level it, teacher can update personal information and student’s academic result. Remove and insert students into the course. |
| R6.3 |  | In student access level, student can update personal. |
| R7 | User ID format | There should have three type of ID for different users. Sample are below:    Administer: “a1234567”  Teacher: “t1234567”  Student: “s1234567”    The first character stand for different accessibility. And last 7 character is a random unique number for different user. |

# Non-Functional requirement

|  |  |  |
| --- | --- | --- |
| Requirement ID | Area | Description |
| N1 | Timing constraints | we should complete the system within 2 months |
| N2 | Performance and scalability | the system return results is not larger than 1 second. |
| N3 | Portability and compatibility | the system use java to coding, so you can open it with any software related to java |
| N4 | Security | We do not have sufficient capabilities to set up protective measures to protect user data and systems |
| N5 | User-friendliness | Envision the user, consider ease of use, user satisfaction. |

# Validation testing

(5 test case)

## Test case 1

|  |  |
| --- | --- |
| Test case ID | T1 |
| Test case based on requirement | R1 |
| Test case description | Testing the login system with valid input |
| Input | User id: s0019323  Password: mT797063345 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “s0019323”, enter password as “mT797063345”. |
| Step 2 | Click the login button. |
| Expected output | System will direct to the main page, the user id will show on the top left right hand corner. |

## Test case 2

|  |  |
| --- | --- |
| Test case ID | T2 |
| Test case based on requirement | R2 |
| Test case description | User verification |
| Input | User id: s0019323  Password: mT797063345  or  User id: t8053384  Password: Mwb792661 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “s0019323”, enter password as “mT797063345”. |
| Step 2 | Click the login button. Then system will show a message “Logged in as student” and show the student screen |
| Step 3 | Click the logout button to login other account |
| Step 4 | In the login screen, enter the user id as “t8053384”, enter password as “Mwb792661”. |
| Step 5 | Click the login button. Then system will show a message “Logged in as teacher” and show the teacher screen |
| Expected output | System can verify what your accessibility level for going to different screen. |

## Test case 3

|  |  |
| --- | --- |
| Test case ID | T8 |
| Test case based on requirement | R6 |
| Test case description | Testing user update personal information |
| Input | User id: s0019323  Password: mT797063345 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “s0019323”, enter password as “mT797063345”. |
| Step 2 | Click the login button. System will direct to the main page. |
| Step 3 | Click profile button. |
| Step 4 | The system will show user personal information. |
| Step 5 | Click update button of phone number |
| Step 6 | Input “85254568” and click confirm button |
| Step 7 | The system will show update successful |
| Expected output | User successful change the personal information |

## Test case 4

|  |  |
| --- | --- |
| Test case ID | T4 |
| Test case based on requirement | R5.2 |
| Test case description | Testing Teacher get their registered course list and student’s academic result. |
| Input | User id: t8053384  Password: Mwb792661 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “t8053384”, enter password as “Mwb792661”. |
| Step 2 | Click the login button. Then system will show a message “Logged in as teacher” and show the teacher screen. |
| Step 3 | The list of registered courses is successfully displayed on the left side of the teacher screen. |
| Step 4 | Click the c3111921 of course. |
| Step 5 | The system will show students in the course. |
| Step 6 | Click the Student s4854885. |
| Step 7 | The system will successfully display the academic performance of the selected student. |

## Test case 5

|  |  |
| --- | --- |
| Test case ID | T5 |
| Test case based on requirement | R5.1 |
| Test case description | Testing Admin to get and edit information of teachers and students, add new account. |
| Input | User id: a2437483  Password: mT79706m6 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “a2437483”, enter password as “mT79706m6”. |
| Step 2 | Click the login button. Then system will show a message “Logged in as admin” and show the admin screen. |
| Step 3 | There are three panel show in the page which show all the courses teachers and students panel. |
| Step 4 | Click the t0738118 in teacher panel, show show the information of that teacher |
| Step 5 | Click update for phone number and type 93486543. It change the phone number successfully. |
| Step 6 | Click the add student button and add StudentID: s2765433  First Name: Tai Man  Last Name: Chan  Address: 1 suiroad  Phone Number: 68904650  Email: TaiMan@gmail.com  Password: Kk123456 |
| Step 7 | The system will display student add successfully |

# Defect testing

## Test case 6

|  |  |
| --- | --- |
| Test case ID | T6 |
| Test case based on requirement | R1 |
| Test case description | Testing login system with invalid input |
| Input | User id: testtest  Password: mT797063345 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “testtest”, enter password as “mT797063345”. |
| Step 2 | Click the login button. |
| Expected output | System will show a dialog with a error message “wrong User ID or password”. |

## Test case 7

|  |  |
| --- | --- |
| Test case ID | T7 |
| Test case based on requirement | R3 |
| Test case description | Testing user enters the wrong password 3 times system will lock the account |
| Input | User id: s0019323  Password: abc123 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “s0019323”, enter password as “abc123”. |
| Step 2 | Click the login button. System will show a error message |
| Step 3 | Repeat 3 time of Step 1 and Step 2 |
| Expected output | System will lock the account. |

## Test case 8

|  |  |
| --- | --- |
| Test case ID | T8 |
| Test case based on requirement | R6 |
| Test case description | Testing user update personal information |
| Input | User id: s0019323  Password: mT797063345 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “s0019323”, enter password as “mT797063345”. |
| Step 2 | Click the login button. System will direct to the main page. |
| Step 3 | Click profile button. |
| Step 4 | The system shows user personal information. |
| Step 5 | Click update button of phone number |
| Step 6 | Input “123456” and click confirm button |
| Step 7 | The system will show error message “phone number need to exactly 8 – 10 number”. |
| Expected output | User cannot change the personal information within wrong type input |

## Test case 9

|  |  |
| --- | --- |
| Test case ID | T9 |
| Test case based on requirement | R6 |
| Test case description | Testing user update personal information. |
| Input | User id: s0019323  Password: mT797063345 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “s0019323”, enter password as “mT797063345”. |
| Step 2 | Click the login button. System will direct to the main page. |
| Step 3 | Click profile button. |
| Step 4 | The system shows user personal information. |
| Step 5 | Click update button of email. |
| Step 6 | Input “123” and click confirm button. |
| Step 7 | The system will show error message “Email only contain 1-50 character and must include @ character”. |
| Expected output | The system cannot update data that does not meet email specifications. |

## Test case 10

|  |  |
| --- | --- |
| Test case ID | T10 |
| Test case based on requirement | R5.1 |
| Test case description | Testing add student. |
| Input | User id: a2437483  Password: mT79706m6 |
| Test step | Test detail |
| Step 1 | In the login screen, enter the user id as “a2437483”, enter password as “mT79706m6”. |
| Step 2 | Click the login button. System will direct to the main page. |
| Step 3 | Click Add Student button. |
| Step 4 | Input these information  StudentID: 2765433  First Name: Tai Man  Last Name: Chan  Address: 1 suiroad  Phone Number: 68904650  Email: TaiMan@gmail.com  Password: Kk123456 |
| Step 5 | Click Add Student. |
| Step 6 | The system will show error message “Student ID must start with “s”, followed by exactly 7 digits”. |
| Expected output | The system does not allow add the student ID not begin with “s”. |