**CS2S567 Professional Practice and Employability: Team Based Software Development Workshop**

**PIM GUI System Testing Documentation**

**Written by**

**Team 2, Group 1 (Personal Information Management)**

1. Lewis Impey (30005227)
2. Shantanu Talukder (30014667)
3. Jacob Beynon (30005218)
4. Ryan Murunga (30008082)
5. Nisa Shahril (18108598)

**Creation of the Main PIM System Page**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date: 9/02/2021  System: PIM System  Objective: Main System Functionality  Function: Operation of Main System Functionality  Version/Release: 2.0  Status: In Progress | | | | Tested by: Jacob, Lewis, Ryan, Nisa, Shantanu  Environment: PyCharm  Test ID: MainPIMSystem\_1  Screen:  Test Type: Manual testing | | |
| Step | Step Description | Path & Action | Test Data | Expected Results | Actual Result  Pass/Fail | Comments |
| 1 | Creation of Main PIM system page | User clicks the PIM drop-down on home page and loads the form | Properties for PIM page(size of page, colour, buttons, textboxes, size and display of database) | The colour of the form, size of the labels, buttons, and database should all be formatted correctly and the form should load | Pass | Form is loaded successfully, but database used is a dummy database |
| 2 | Searching database | User enters ID to search for and returns information about that user | Dummy database | The data associated with the searched for ID would be displayed | Fail | The searching feature is not implemented |
| 3 | Adding to database | User inserts necessary data and adds new user to database | Dummy database | The new user would be made using the inserted data and added to the database | Fail | The add feature is not currently implemented |
| 4 | Deleting from database | The user would select a user in the database and click the delete button to remove them | Dummy Database | The selected user would be removed from the database | Fail | The delete feature is not yet implemented |
| 5 | Logging out from PIM system | The user selects the log out option from the drop-down |  | The user would be logged out and the main PIM system form would close | Pass | Function works successfully |

**Creation of the Home page**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date: 23/02/2021  System: PIM System  Objective: To display the home PIM page successfully  Function: Creation of home page  Version/Release: 2.1  Status: In Progress | | | | Tested by: Jacob, Lewis, Ryan, Nisa, Shantanu  Environment: PyCharm  Test ID: HomePage\_1  Screen:  Test Type: Manual testing | | |
| Step | Step Description | Path & Action | Test Data | Expected Results | Actual Result  Pass/Fail | Comments |
| 1 | Opening program | User opens executable file and program is run |  | The program executes and opens correctly with no errors | Pass | Program opened successfully |
| 2 | Creation of home page | Program is run and executes the function to run the home page | Properties for home page(size of page, colour, buttons, textboxes) | The home page should be created and the formatting for the labels, images, background colour, and drop-down box should be correct | Pass | The home page is successfully run and the formatting for the objects on the page are correct |
| 3 | Login drop-down option functions: Login | The user navigates to the login option in the drop-down box and clicks it |  | The login page creation function should be run and the login page should be displayed | Pass | The login page opened successfully |
| 4 | Login drop-down option functions: Quit | The user navigates to the quit option in the drop-down box and clicks it |  | When clicked, the program should terminate and the home page should close | Pass | Program closes successfully |
| 5 | Main PIM system drop-down functionality | The user navigates to the drop-down for the PIM system and clicks it |  | The PIM system form should be created and loaded | Pass | Form creates and displays successfully |

**Log-in Form Testing**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date: 23/02/2021  System: PIM System  Objective: Logging In program  Function: Creation of Log In page & Logging in  Version/Release: 2.1  Status: In Progress | | | | Tested by: Jacob, Lewis, Ryan, Nisa, Shantanu  Environment: Pycharm  Test ID: Login\_1  Screen:  Test Type: Manual testing | | |
| Step | Step Description | Path & Action | Test Data | Expected Results | Actual Result  Pass/Fail | Comments |
| 1 | Creation of log in page | Program navigates to login page creation function | Properties for login page(size of page, colour, buttons, textboxes) | Log in page is created successfully and everything is placed correctly | Pass | Format is consistent with quality assurance documentation |
| 2 | Username and Password insertion | User enters username and password into the provided textboxes | Data entered into text boxes | Text is shown in the text box and password text is changed to ‘\*’ for added security | Pass | Password encryption works correctly and information is added correctly |
| 3 | Terms and Conditions display | User clicks terms and conditions label | LSEPI document | When clicked, the LSEPI document should be opened for the user to read. | Pass | LSEPI document is opened up as a pdf for the user to read before they login |
| 4 | Terms and conditions tick box and login in button activation | User clicks the tick box to verify that they have read the terms and conditions. |  | When the tick box is clicked, the state should be changed to ticked, then the login button should become available to click | Fail | We were unable to implement the disabling of the login button, and have instead opted to set the button as not visible until ticked |
| 5 | Terms and conditions tick box and login in button displays | User clicks the tick box to verify that they have read the terms and conditions. |  | When the tick box is clicked, the state should be changed to ticked, then the login button should appear | Pass | Test passes successfully |
| 6 | User credentials are checked, and user is logged in | User clicks the log in button and attempts to log in | Username and password fields and Users Database | The program would check the database credentials against the entered credentials and would log the user in if correct | Pass | The user is successfully logged in when using valid credentials |
| 7 | User does either fails to enter a username, password, or both | User attempts to log in without entering any credentials | Username and password fields | An if would be ran to check if the username or password fields were empty, and if they were would display an error message | Pass | Program notifies user of invalid login |
| 8 | User entered credentials are incorrect | User attempts to log in with invalid credentials | Username and password fields and Users Database | The program would test the entered credentials against the database and would return that the credentials are incorrect | Pass | Program notifies user when entered credentials are incorrect |

**Creation of the Main PIM System Page**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date: 23/02/2021  System: PIM System  Objective: Main System Functionality  Function: Operation of Main System Functionality  Version/Release: 2.1  Status: In Progress | | | | Tested by: Jacob, Lewis, Ryan, Nisa, Shantanu  Environment: PyCharm  Test ID: MainPIMSystem\_2  Screen:  Test Type: Manual testing | | |
| Step | Step Description | Path & Action | Test Data | Expected Results | Actual Result  Pass/Fail | Comments |
| 1 | Creation of Main PIM system page | User clicks the PIM drop-down on home page and loads the form | Properties for PIM page(size of page, colour, buttons, textboxes, size) | The colour of the form, size of the labels, button should all be formatted correctly and the form should load | Pass | Form is loaded successfully |
| 2 | Creation of Database | Form is loaded | Accounts Database | The database would load and format correctly | Fail | Database works correctly, but there are some formatting issues with the display of the database (such as .0s being added after every ID) |
| 3 | Searching database | User enters ID to search for and returns information about that user | Accounts database | The data associated with the searched for ID would be displayed | Pass | The information about the sought-after user is displayed on screen |
| 4 | Adding to database | User inserts necessary data and adds new user to database | Accounts database | The new user would be made using the inserted data and added to the database | Pass | The new user is added successfully to the database |
| 5 | Deleting from database | The user would select a user in the database and click the delete button to remove them | Users Database | The selected user would be removed from the database | Pass | The selected user is successfully deleted from the database |

**Implementation of Preventative Measures against 2 Software Vulnerabilities**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date: 25/02/2021  System: PIM System  Objective: To prevent software vulnerabilities  Function: Increasing Security of System  Version/Release: 2.1  Status: In Progress | | | | Tested by: Jacob, Lewis, Ryan, Nisa, Shantanu  Environment: PyCharm  Test ID: SoftwareSecurity\_1  Screen:  Test Type: Manual testing | | |
| Step | Step Description | Path & Action | Test Data | Expected Results | Actual Result  Pass/Fail | Comments |
| 1 | Preventing user from adding or deleting users without sufficient permissions from database | User logs in as normal user and attempts to add or delete a user | Users Database | The program would check the logged in user’s permissions and if they would be prevented from using the add or delete functions | Pass | User is prevented from using these functions as a normal user |
| 2 | Allows administrator to use add and delete functions | User logs in as an admin and attempts to add or delete a user | Users Database | The program would check the logged in user’s permissions from the database and would then allow the user to add or delete | Pass | The administrator user is allowed to use these functions |
| 3 | SQL Injection during logging in | User attempts to execute SQL commands during logging in through the username or password textboxes | Input text in the username and password textboxes | The text would be inspected for SQL injection threats and would prevent them from being executed if found | Pass | SQL Injection is prevented |
| 4 | SQL Injection during searching | User attempts to execute SQL commands during searching for a user in the database | Input text in the searching textbox | The text would be inspected for SQL injection threats and would prevent them from being executed if found | Pass | SQL Injection is prevented |
| 5 | SQL Injection during adding a new user to the database | User attempts to execute SQL commands during adding a new user | Input text in any of the textboxes needed for adding a new user’s information | The text would be inspected for SQL injection threats and would prevent them from being executed if found | Pass | SQL Injection is prevented |