Cover Page

Project Name: School Teaching Management System Development (Version 3.0)

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Group Number: 6

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Testing Plan

Version 3.0 (10th Dec 2023)

Validation Test

| Test Item | Test Objective | Test Steps | Test  Status |
| --- | --- | --- | --- |
| Login Function | Validate the login functionality of the software | Enter the correct ID and password, expect successful login | Validated |
|  |
| Confirm unique login cookie is generated | Validated |  |
|  |
| Verify successful direct navigation to the dashboard | Validated |  |
|  |
| Enter wrong password or ID, expect error message | Validated |  |
| First Time Login | Validate the first-time login process for new users | Verify existing student name matches given ID, expect redirection to create password page | Validated |  |
|  |
| Collect birthday information | Validated |  |
|  |
| Collect passport information | Validated |  |
|  |
| Create password | Validated |  |
|  |
| Able to login using the new password | Validated |  |
| Dashboard Directory | Validate the functionality of the dashboard and its components | Click on the profile icon and verify personal information is displayed | Validated |  |
|  |
|  |
| Verify personal information matches the logged-in user | Validated |  |
|  |
| Test the buttons for various directory functions (search, student list, staff list, logout) | Validated |  |
| Student List & Staff List | Validate the student list and staff list functionality | Match all information in the database with the displayed list | Validated |  |
| Check for any position errors in the table | Validated |  |
| Search | Validate the search functionality of the software | Choose a search category | Validated |  |
|  |
| Enter ID or name input and expect results based on the selected category | Validated |  |
|  |
| Verify that a notification is shown when no matching results are found | Validated |  |

Defect Test

1. Test1

a)       Situtation: First time login Password Creation stage

b)      Problem: Spaces can be saved as passwords.When a space is set as the login password, the system allows further operations.

Explanation: The system does not validate or restrict the use of spaces as password characters, so spaces are accepted as valid passwords.

c)       Example

The following is a diagram illustrats password stored in database can be with multiple space in middle or at the end. This might cause Users to miss create their passwords or forget them frequecntly.

图形用户界面, 文本

描述已自动生成

d)      Solution:

Register will fail and notification will be shown to users when they space detected in a password.

图形用户界面

描述已自动生成

1. Test2

a)       Situtation: First time login Information Collection Stage

b)      Problem: Passport No and Email Address can be repeated

Explanation: Information like contact info and travel documents should be unique for every user.

c)       Example

The following is a diagrams illustrats repeated email address and passport numbers for different user.

表格

描述已自动生成

表格

中度可信度描述已自动生成 图形用户界面

低可信度描述已自动生成

d)       Solution:

Related notification will be be given to users and the register stage will fail once repeated contact information or travel document  detected.

1. Test3
2. Situtation: First time login Information collection stage

b)      Problem:Age can be set unreasonable

Explanation: In this test, birthday like year 1111 which is 912years or 2077 which is in the future can be set as user’s birthday.

c)       Example

The following is a diagram illustrats unreasonable ages collected from registration stage.

表格

描述已自动生成

d)      Solution:

Constraint has been added to the Input box to restrict the inputs. Related notification will be given if user put a unreasonable birthday.

(Language shown here depends on user’s system environment)

图形用户界面, 文本, 应用程序

描述已自动生成

1. Test4

a)       Situtation: Access pages without logging page

b)      Problem:Pages can be accessed without cookies verification

Explanation: Every page should be well protected for information security.

c)       Example

The following is a diagrams illustrats “/StudentList”Page was missing cookie proction and can be accessed without any verification.

图形用户界面

描述已自动生成

d)      Solution

                        Was session verification method added to all unprotected pages

文本

描述已自动生成

1. Test5

a)       Situtation:When using Search function

b)      Problem: Some time search function wont return results when searching using categorise other then “id”.

Explanation: system searching logic is to search by name after detecting id is null, but when inputs passed to the controller, sometime the return variable of id wont be defined as a null. And this might cause the search function to return empty result when user trying to use different search categories.

c)       Example

The following is a diagrams illustrats the reason which caused this problem in the code in searching function.

文本

描述已自动生成

d)      Solution

The “if(!id.isEmpty()&&!name.isEmpty())” is used to replace previous logic to make sure there are no any inputs in “id” then pass the search function to search by names.

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