American International University-Bangladesh

Software Quality and Testing Report

Course Teacher: ABHIJIT BHOWMIK

Section: B

Group Members:

Name	Id
1.MD MOSTOFA HASIB	21-44938-2
2. ALIF HOSSAIN TALHA	21-44923-2
3. REDOANUL HAQUE RIYAD	21-44708-1
4. SAIFA BINTAY SHAHJAHAN	20-42300-1

Project Title: Testing Student Management system with Selenium IDE.

Overview: For our testing initiative, we employed a dedicated website crafted specifically for our testing objectives. We seamlessly incorporated the Selenium IDE extension into our browser to enhance efficiency during the testing process. Our methodology centered on meticulously executing tests in a systematic fashion to guarantee comprehensive coverage. Enclosed within this report are screenshots elucidating the integration process and delineating each step of the testing conducted on the website. These screenshots serve to meticulously document our testing methodology and furnish compelling visual evidence of our procedures and outcomes.

Testing Objectives: The principal aims of our testing procedure were as follows:

1. Validation of Functionality: To ascertain that all features and functionalities of the web-based program operate in accordance with the provided specifications.

2. Detection of Defects: To identify and meticulously document any deviations, errors, or incongruities in the program's performance, with the intention of enhancing its overall quality and dependability.

Additionally, our testing process aimed to ensure compatibility across various platforms and devices, including different web browsers and operating systems. This encompassed conducting tests on popular browsers such as Chrome, Firefox, Safari, and Edge, as well as assessing the program's responsiveness on desktops, laptops, tablets, and mobile devices. By verifying consistent functionality and user experience across diverse environments, we strived to guarantee a seamless and accessible product for all end-users, regardless of their chosen platform or device. By concentrating on these objectives, our intention was to evaluate the program's efficacy, reliability, and user-centric attributes, with the ultimate goal of delivering a superior-quality product to end-users.
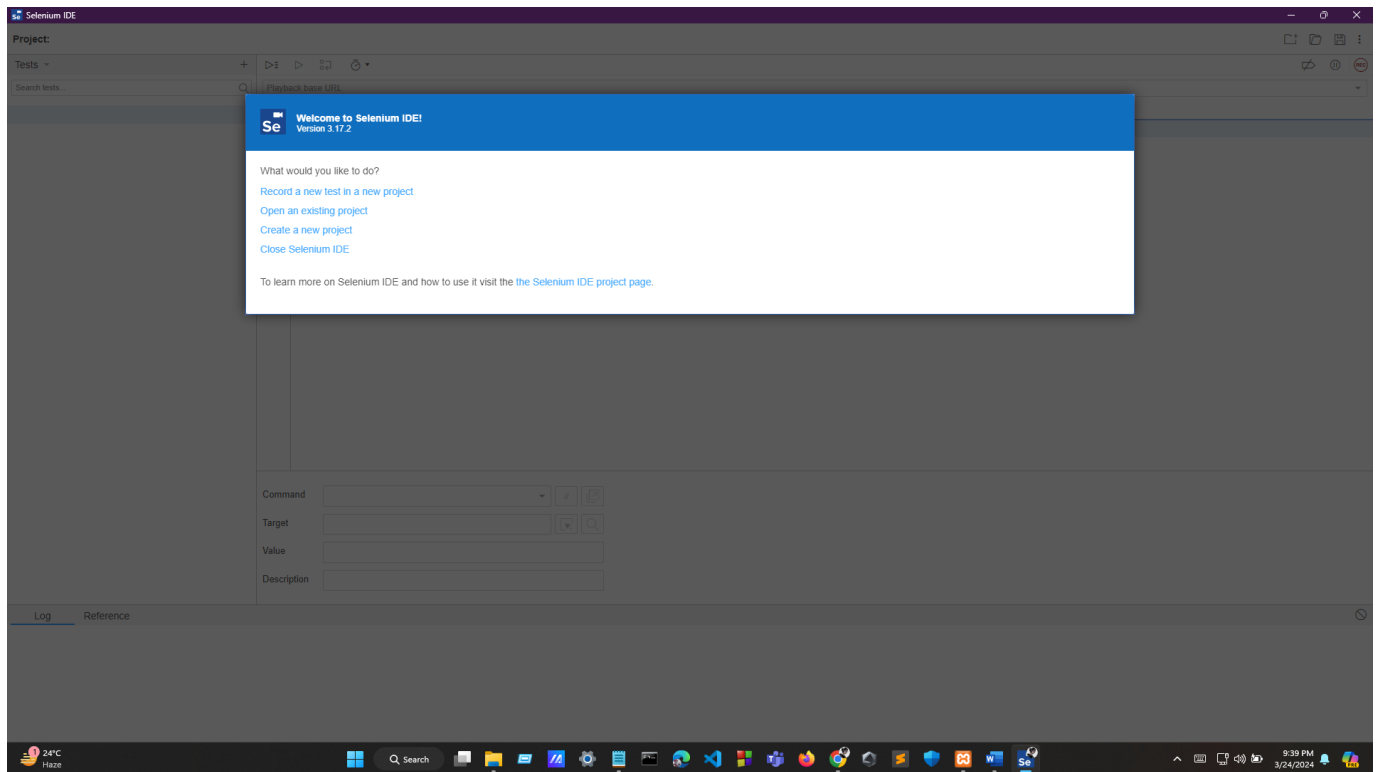
Tools Used: For our testing endeavors, we exclusively utilized Selenium as our core testing tool. Integrated seamlessly with our browser through the Selenium IDE extension, Selenium facilitated efficient test automation and comprehensive validation of the web-based program's functionality.
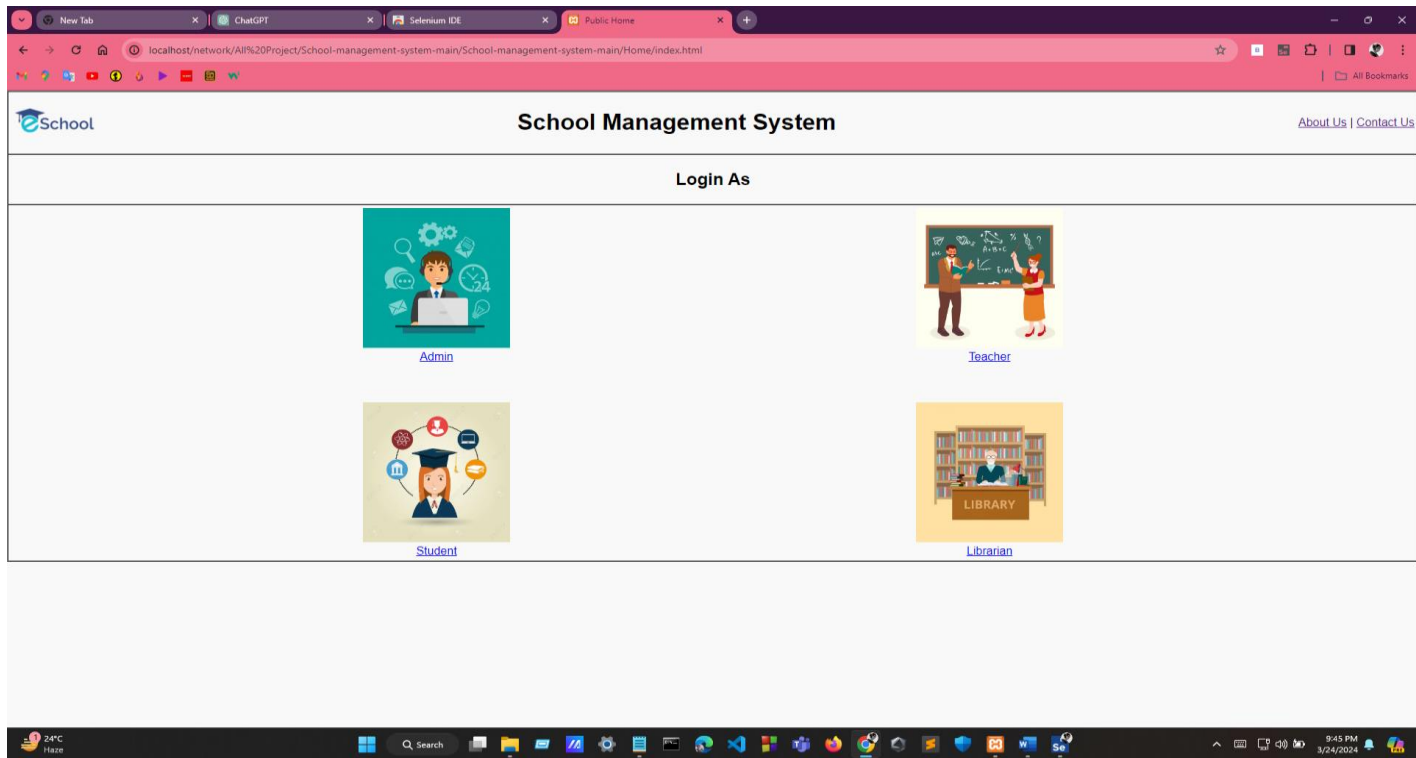
Test Environment:

The testing was conducted in a controlled environment, utilizing the following specifications:

1. Operating System: Windows

2. Browser: Google Chrome

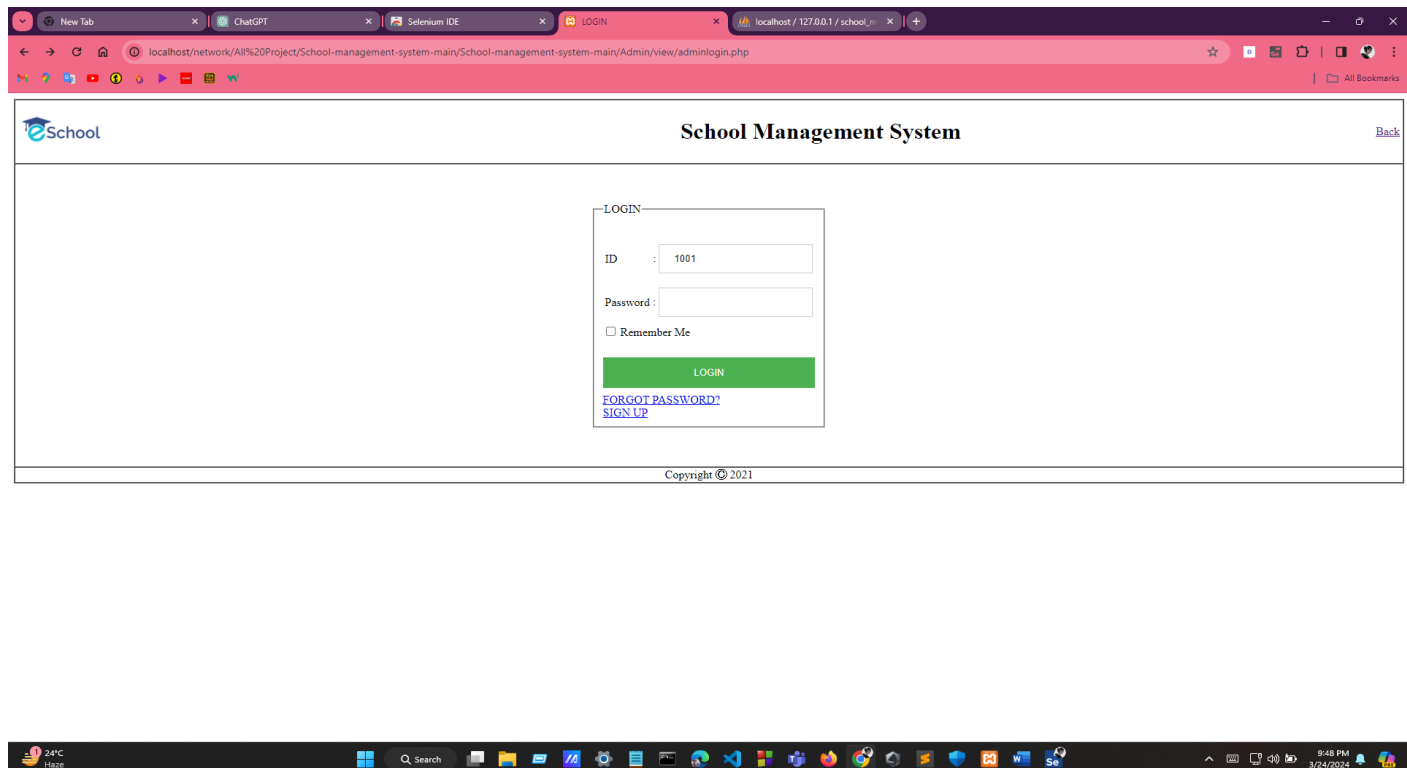3. Selenium IDE Extension: Integrated into the Google Chrome browser.

The establishment of this standardized environment ensured uniformity throughout the testing process, enabling us to meticulously evaluate the functionality of the web-based program across a spectrum of scenarios with precision and accuracy.

Test Results:

1. Login Test:

1.1 Admin Login Test:

Explanation: We have tested the admin login operation using id and password. As you can see, the testing is successful.

1.2 Teacher Login Test:

Explanation: We have tested the teacher login operation using id and password. As you can see, the testing is successful.

1.3 Student Login Test:
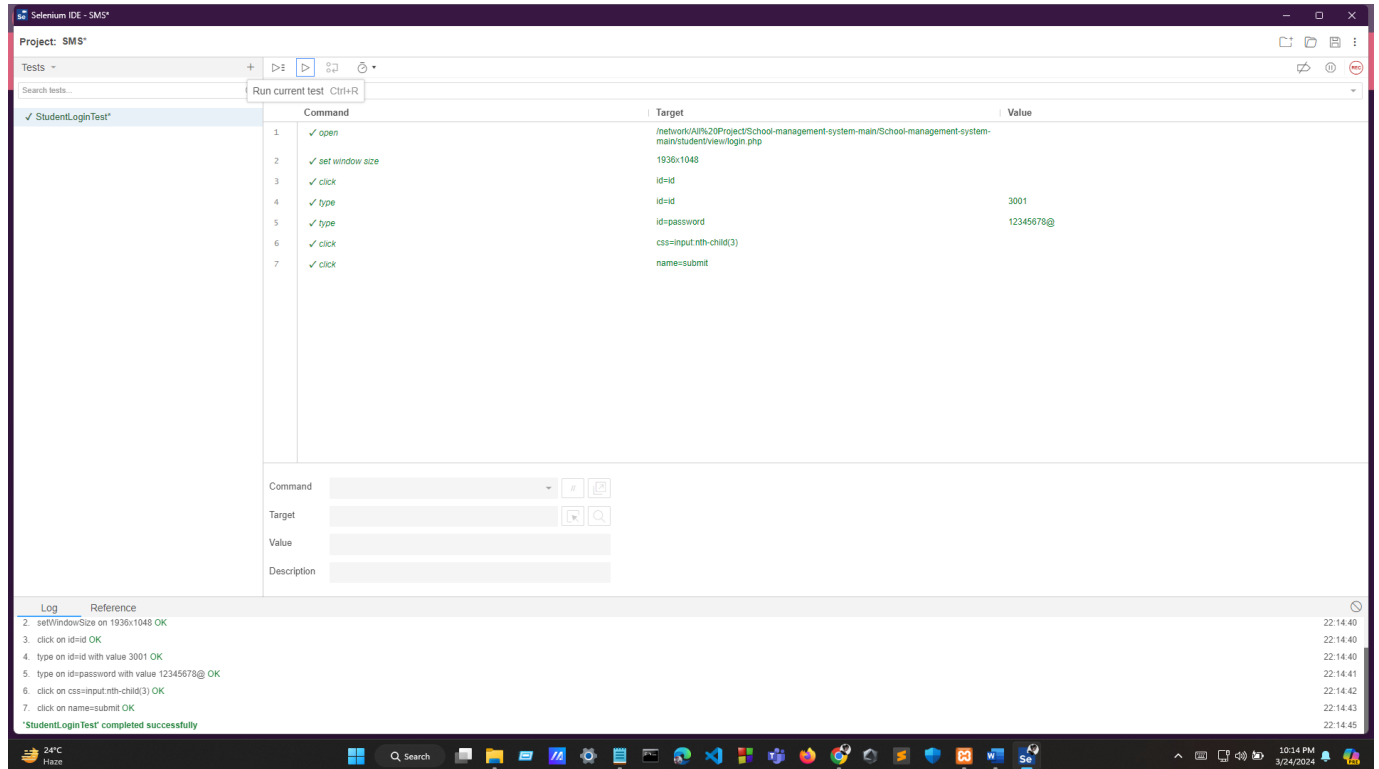
Explanation: We have tested the student login operation using id and password. As you can see, the testing is successful.

1.4 Librarian Login Test:

Explanation: We have tested the librarian login operation using id and password. As you can see,the testing is successful.

2. Admin adding teacher, student View Test:

Teacher adding:

Explanation: We tested whether the teacher has been added or not. Teacher added in the database but an error occurs in the assertAlert on User added Sucessfully! Failed:22:24:42
No response!!!!

Student adding:

Explanation: We tested whether the student has been added or not. Teacher added in the database but an error occurs in the assertAlert on Submitted Sucessfully! Failed:22:24:42 No response!!!!

3. Search Student Test:

Explanation: We have tested the search feature of the project. So, we searched for the student using student id. So, the test is successful here.

4. Notice posting Testing:

Explanation: We have tested the feature of posting notices. We gave values in necessary fields and clicked on submit button. The test is successful.
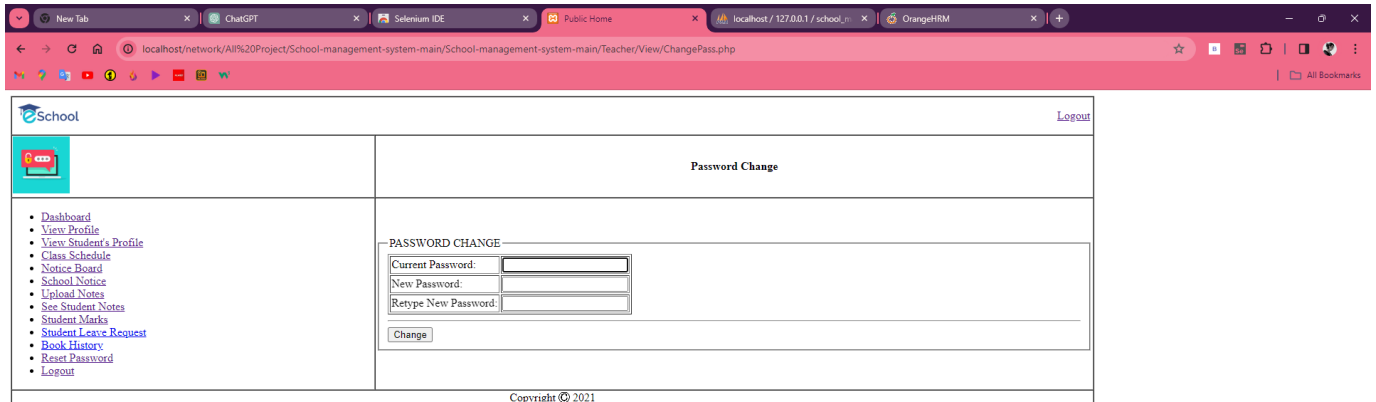
5. Create Course Testing:

Explanation: We have tested the feature of create course. We gave values in necessary fieldsand clicked on submit button. The test is successful.

6. Upload notes Test:
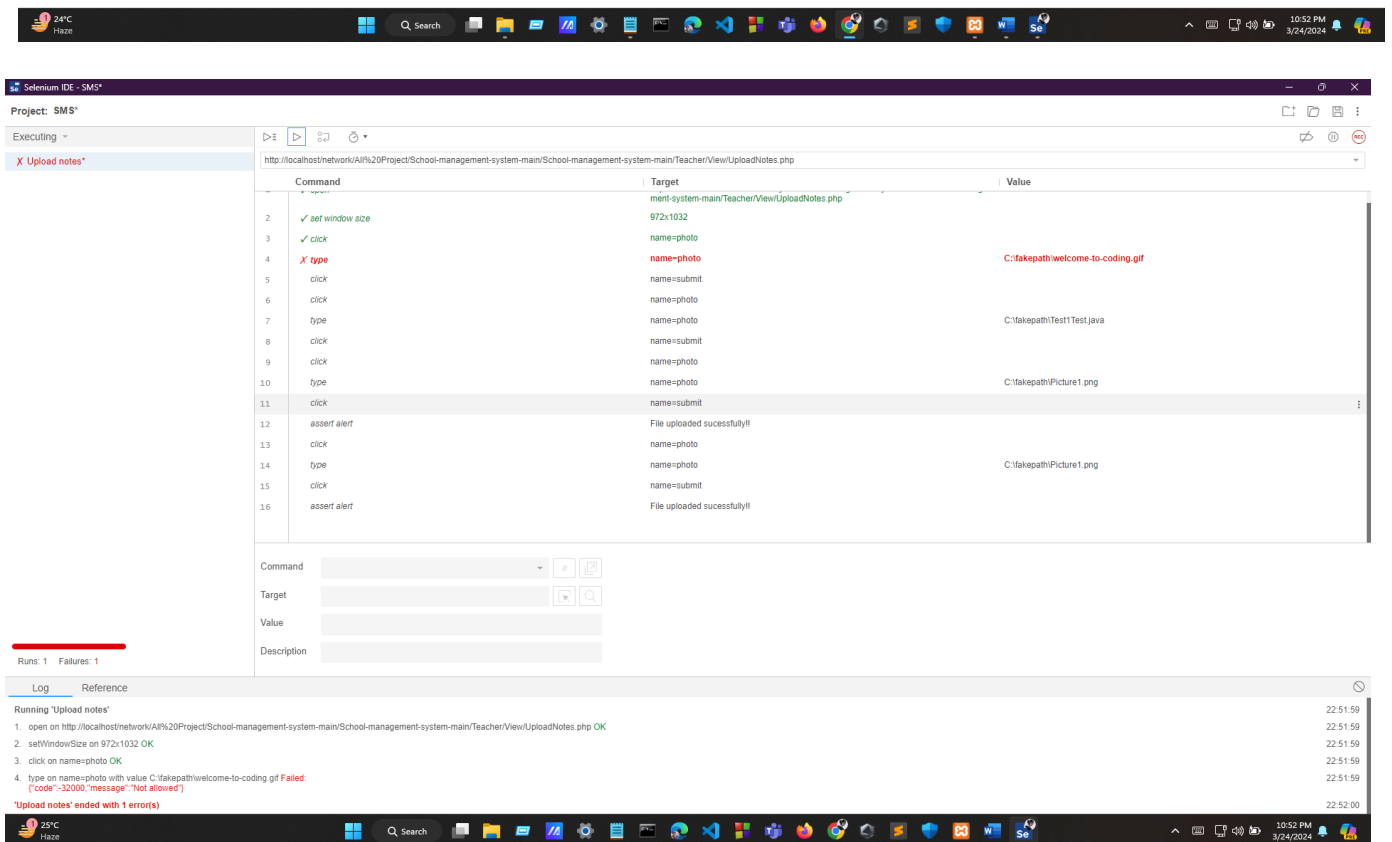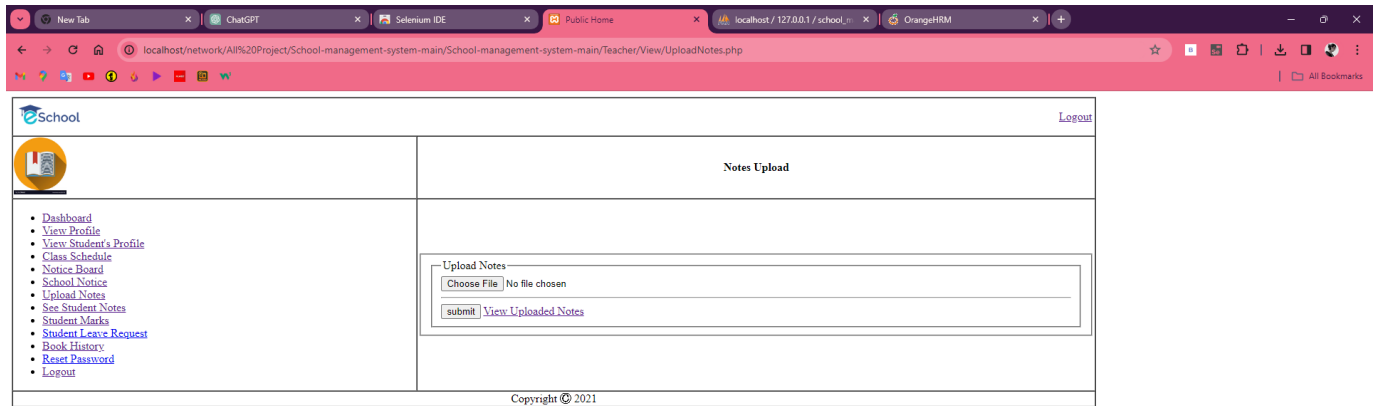
Explanation: We tested the upload notes but an error occurred if wrong path was declared ,the error is C:\fakepath\welcome-to-coding.gif
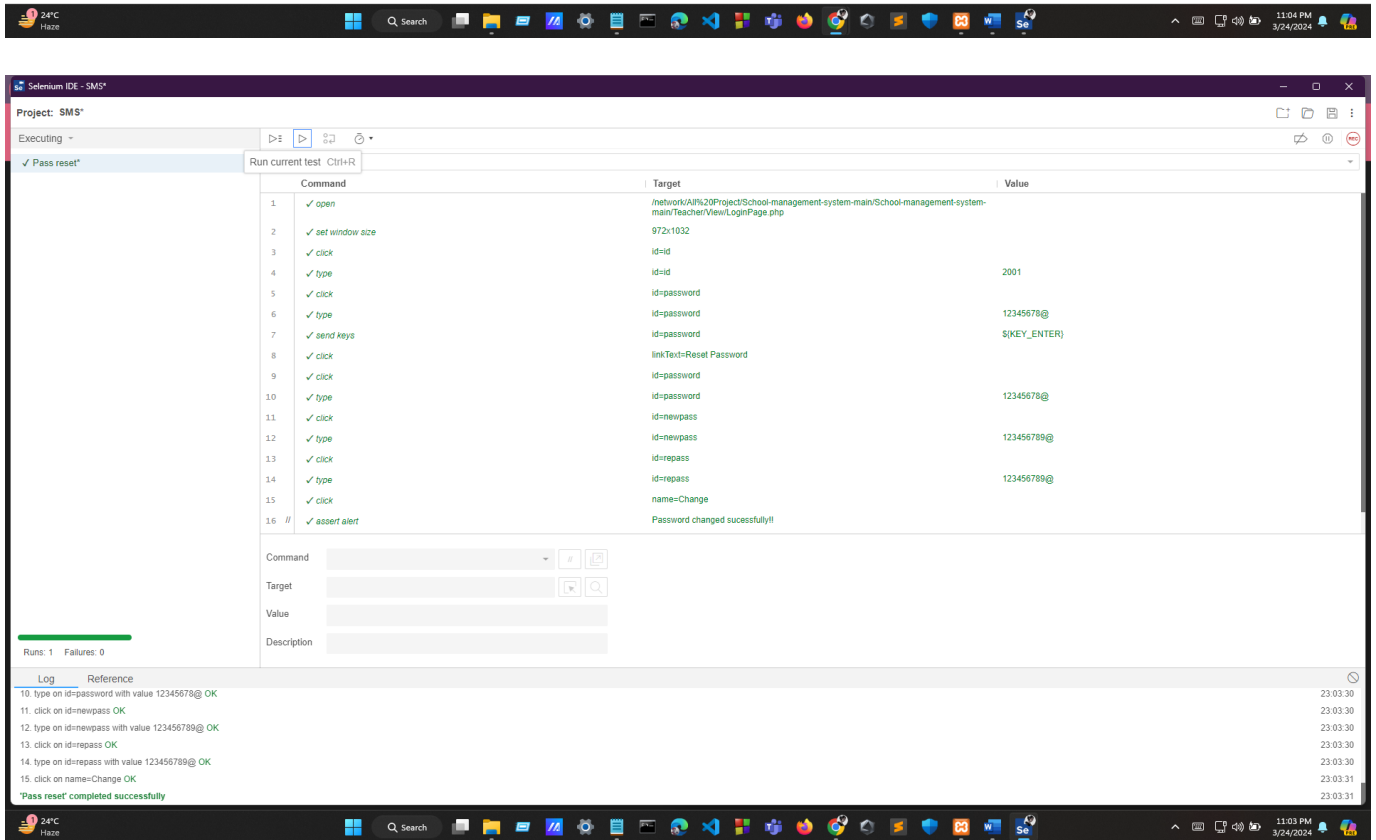
7. Password change Test:

Explanation: We tested the password change feature of the project. Clicking the change button and it worked. So, it worked and the test is successful.

8. Log out Test:
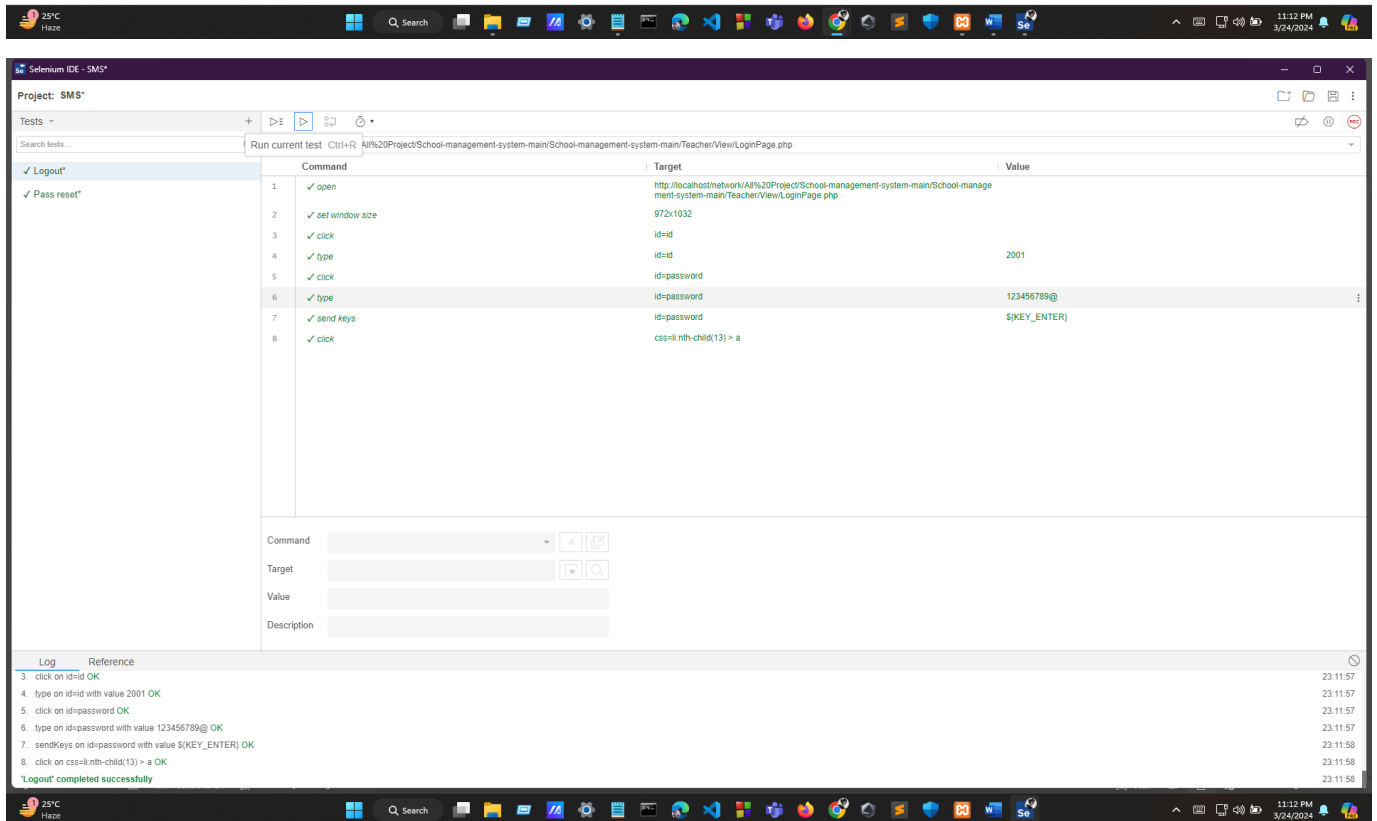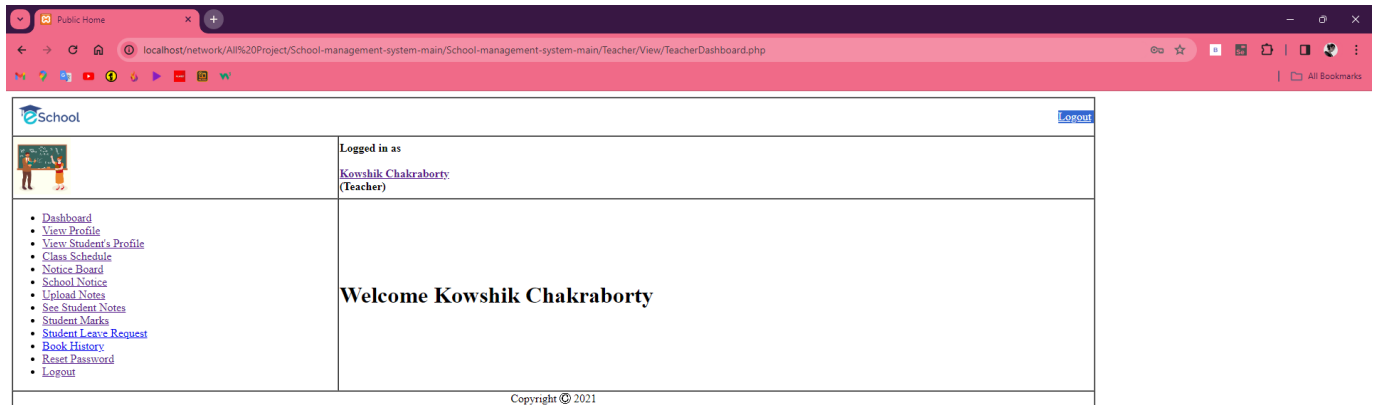
Explanation: We test the log out test in the teacher dashboard after login we click the logout button. So, it worked and the test is successful.

9. Delete student Test:

Explanation: We tested here if it was returning to landing/home page from the login page. This can be done by clicking on the home button. The test is successful.

10. Edit student information Test:

Explanation: We tested the edit of student information using the edit and update button and the test is successfully completed. No error is occurring.

Summary of the test results:

- Total number of test: 14

- Number of test passed: 11

- Number of test failed: 3

- Percentage of test passed: 78.6%

Defects Identified: There are defects in these test cases – Adding Teacher Test, Adding Student Test, Upload notes Test. Defects are shown in the pictures above in the corresponding test cases.

Conclusion: The testing of the School Management system using Selenium IDE has shown promising results with a success rate of 78.6%. While this success rate indicates that a majority of the test cases executed successfully, it also highlights areas where improvements can be made.