# **Automated Test Case Execution using TestRigor for OrangeHRM**

This project demonstrates the practical application of the AI-powered no-code automation tool, TestRigor, to perform functional testing on the OrangeHRM system. The objective was to create and execute automated test cases to verify key functionalities, ensuring system reliability and a smooth user experience.

#### 1. Tool and Application Overview

- OrangeHRM: An open-source Human Resources Management (HRM) system.
- **TestRigor:** A cloud-based, AI-driven test automation tool that allows users to write tests in plain English without any coding. This "no-code" approach accelerates test creation and reduces maintenance, making it highly efficient. The tool uses AI to understand and execute commands, identifying on-screen elements by their visible text, rather than complex locators like XPath or CSS selectors.

#### 2. Test Case Structure and Methodology

The test cases in this project follow a clear, three-step structure common in test automation:

- 1. **Authentication:** The first three steps enter "Admin" into "Username", enter "admin123" into "Password", and click on "Login" are a prerequisite for every test. This sequence ensures that the test environment is correctly set up with the necessary user permissions before executing the core test logic.
- 2. **Action:** This is the core functionality being tested, such as navigating to a specific page or performing a user action.
- 3. **Validation:** This final step verifies that the action had the expected outcome. The command check the page contains "..." is a powerful validation step that confirms the presence of specific text on the page.

## 3. Analysis of Test Scenarios

The test cases are categorized into two groups: "Pass" and "Fail" functions. This is a standard practice in software testing to ensure comprehensive coverage.

## A. OrangeHRM TestRigor Pass Functions:

These test cases are examples of **positive testing**, where the goal is to confirm that the system behaves as expected under normal, valid conditions.

• Check Claim Function: This test logs in and verifies that the "Claim" section is accessible and displayed on the page. It successfully validates a key HR function.

- **Check My Info Function:** Similar to the above, this test verifies successful navigation to the "My Info" page, ensuring the employee self-service module is working correctly.
- Check PIM and Time Functions: These tests validate the functionality of the Personal Information Management (PIM) and Time Management modules by checking for the presence of these elements on the page after a successful login.

# **B. OrangeHRM TestRigor Fail Functions:**

These test cases demonstrate **negative testing**, where the goal is to confirm that the system correctly handles unexpected or invalid scenarios.

- Check Most Recent Photo and Check Student Record Functions: These are crucial examples of negative testing. While the test case logs in successfully, the validation steps check the page contains "Most Recent Photo" and check the page contains "Student Records" fail. This is because the expected text is likely not present on the dashboard after a standard login. The resulting screenshots clearly show the failure, highlighting TestRigor's ability to capture errors for debugging. This showcases an important QA skill: writing test cases that will fail under specific conditions to prove the absence of a feature or a bug.
- Check wrong Password with Dashboard Function: This is a classic negative test case. It is designed to verify that the system prevents login with incorrect credentials. The expected result is a failed login attempt, not the successful display of the "Dashboard".

## 4. Leveraging Global Variables

The use of **Global Variables** is a hallmark of good test automation practice. As seen in your documentation, the username and password were stored as variables.

- Efficiency: Instead of hard-coding Admin and admin123 in every test case, you used enter stored value "username" and enter stored value "password". This approach allows for easy maintenance. If the login credentials change, you only need to update the variable's value once, rather than editing every single test case. This saves significant time and reduces the risk of errors.
- **Reusability:** This method promotes reusability, a core concept in software engineering. The login flow can be treated as a reusable component, which can then be called by any test case that requires a logged-in state.

This project successfully demonstrates your ability to not only write and execute automated test cases but also to apply best practices like positive/negative testing and the use of variables. It highlights a strong understanding of both the QA process and modern automation tools.

# **Orange HRM TestRigor Pass Functions**

## 1. Check Claim Function

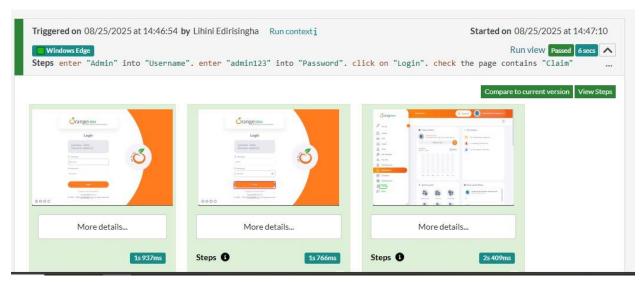
```
Disable re-testing

1 enter "Admin" into "Username"

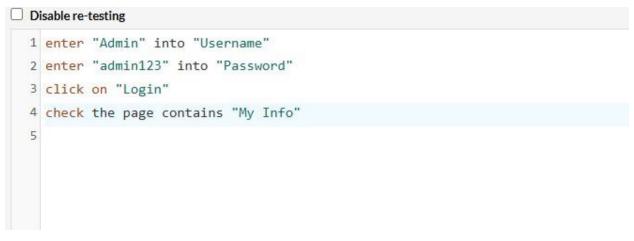
2 enter "admin123" into "Password"

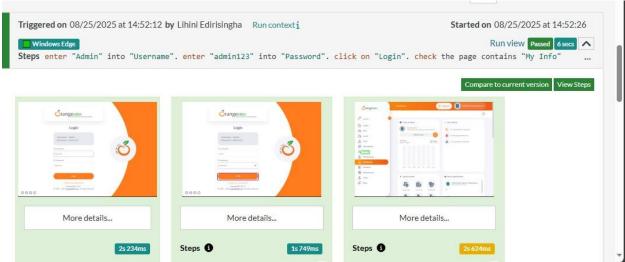
3 click on "Login"

4 check the page contains "Claim"
```



# 2. Check My Info Function

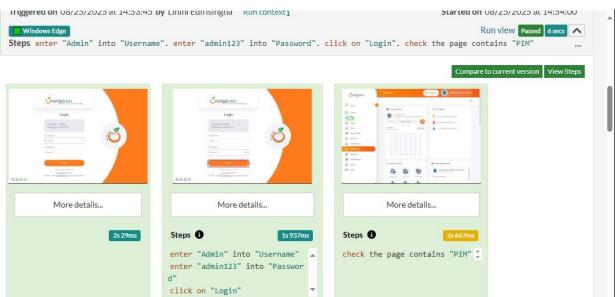




# 3. Check PIM Function

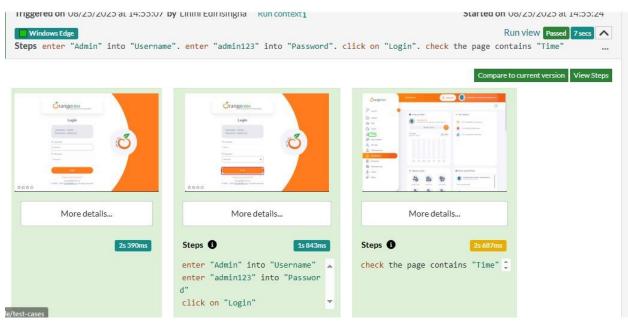
```
Disable re-testing

1 enter "Admin" into "Username"
2 enter "admin123" into "Password"
3 click on "Login"
4 check the page contains "PIM"
```



## 4. Check Time Function

```
1 enter "Admin" into "Username"
2 enter "admin123" into "Password"
3 click on "Login"
4 check the page contains "Time"
5
```



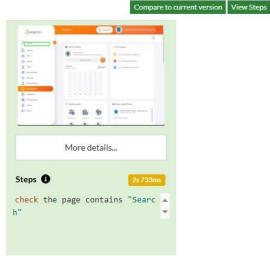
## 5. Check Time Function

```
1 enter "Admin" into "Username"
2 enter "admin123" into "Password"
3 click on "Login"
4 check the page contains "Search"
5
```



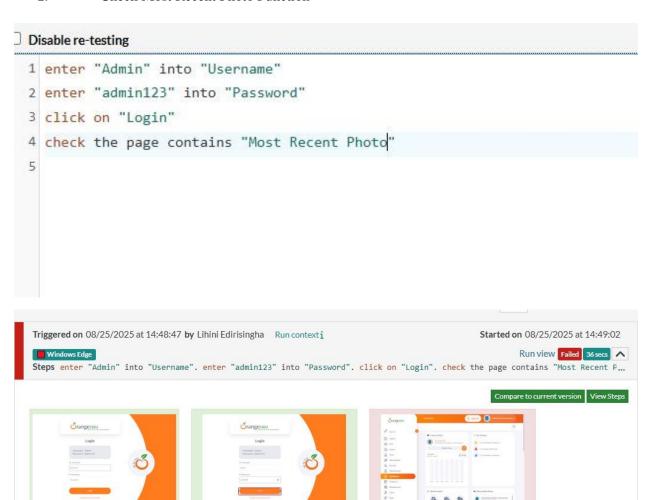






# **Orange HRM TestRigor Fail Functions**

1. Check Most Recent Photo Function



2. Check wrong Password with Dashboard Function

Steps 0

More details...

1s 530ms

More details...

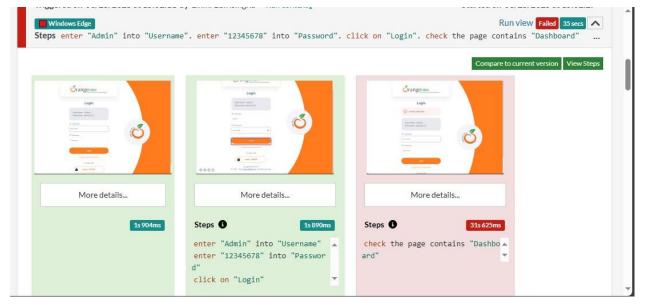
33s 319ms

Steps 6

More details...

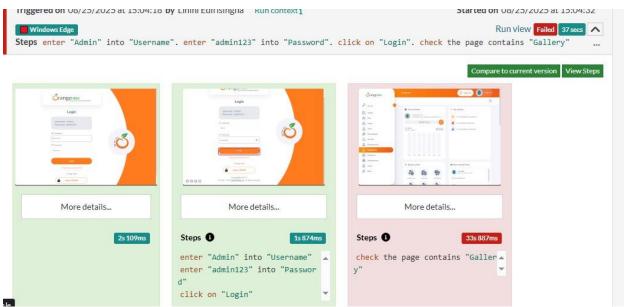
2s 14ms

```
1 enter "Admin" into "Username"
2 enter "12345678" into "Password"
3 click on "Login"
4 check the page contains "Dashboard"
5
```



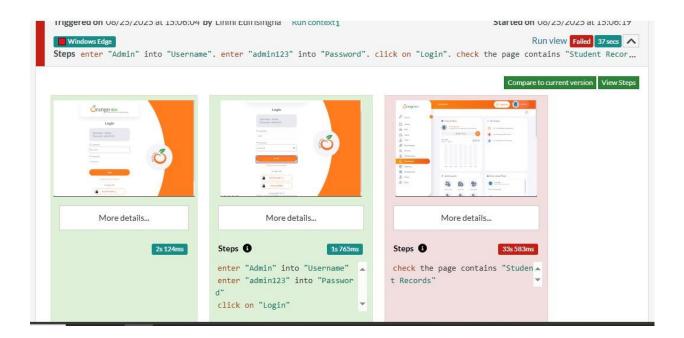
# 3. Check Gallery Function

```
1 enter "Admin" into "Username"
2 enter "admin123" into "Password"
3 click on "Login"
4 check the page contains "Gallery"
5
```



# 4. Check Student Record Function

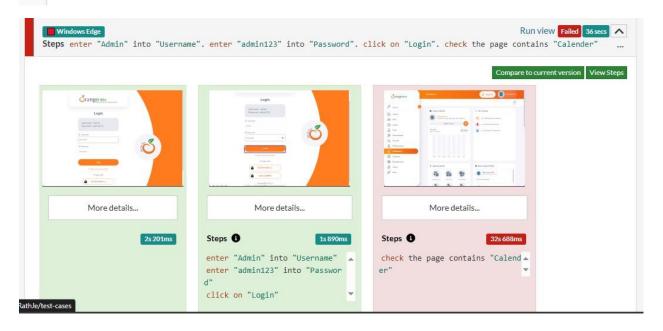
```
1 enter "Admin" into "Username"
2 enter "admin123" into "Password"
3 click on "Login"
4 check the page contains "Student Records"
5
```



## 5. Check Calender Function

```
Disable re-testing

1 enter "Admin" into "Username"
2 enter "admin123" into "Password"
3 click on "Login"
4 check the page contains "Calender"
5
```



# **Using Global Variable Test the Test Case**

