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GROUP 4
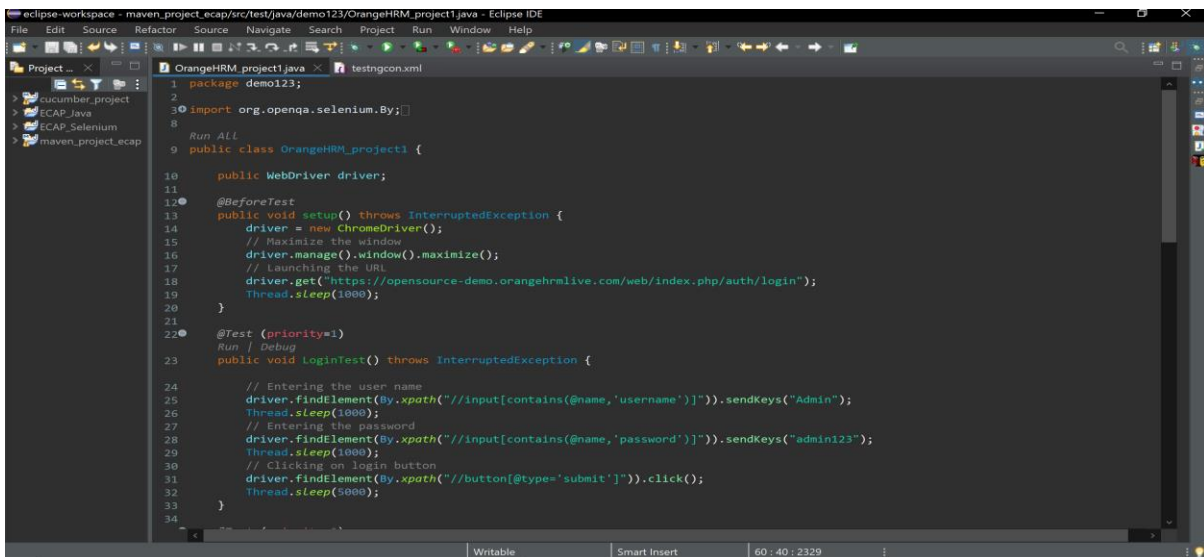
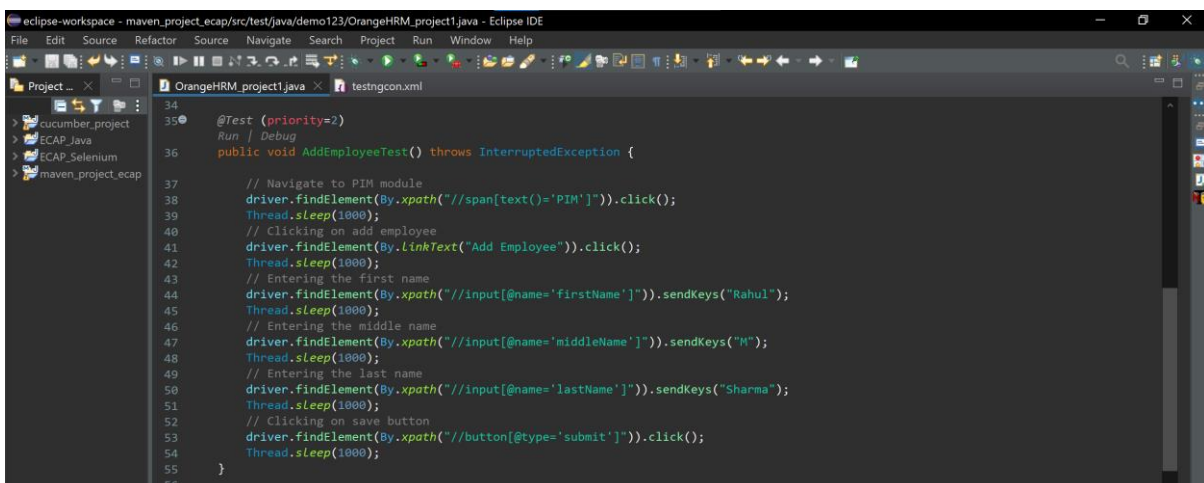## Project-1: OrangeHRM Automation Script using TestNG

Overview:

This project automates several features of the OrangeHRM application using Selenium WebDriver with TestNG. It performs login, adds an employee, searches for an employee, and logs out. The testng.xml configuration is used to run the test suite.
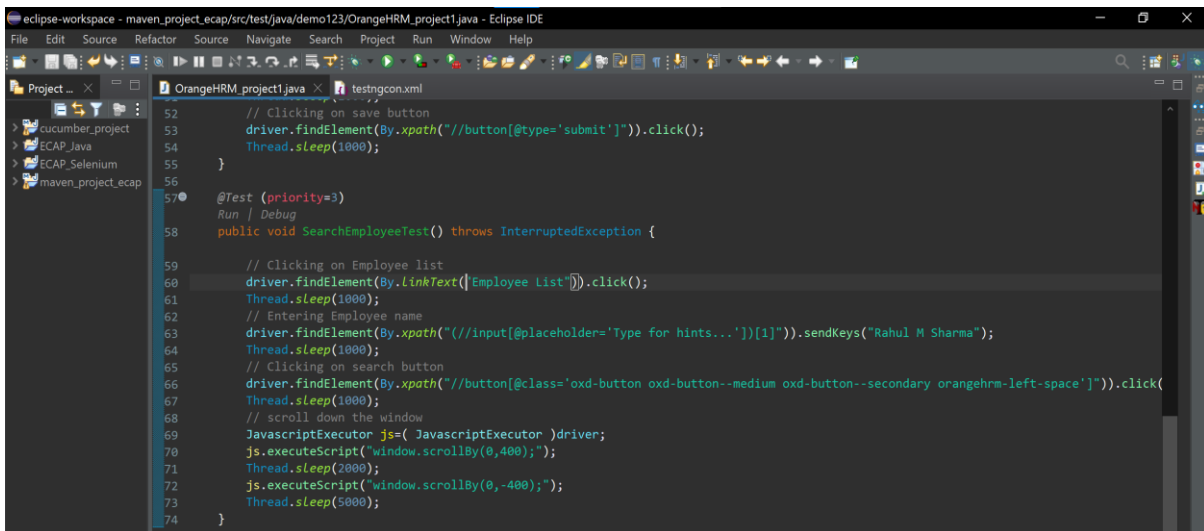
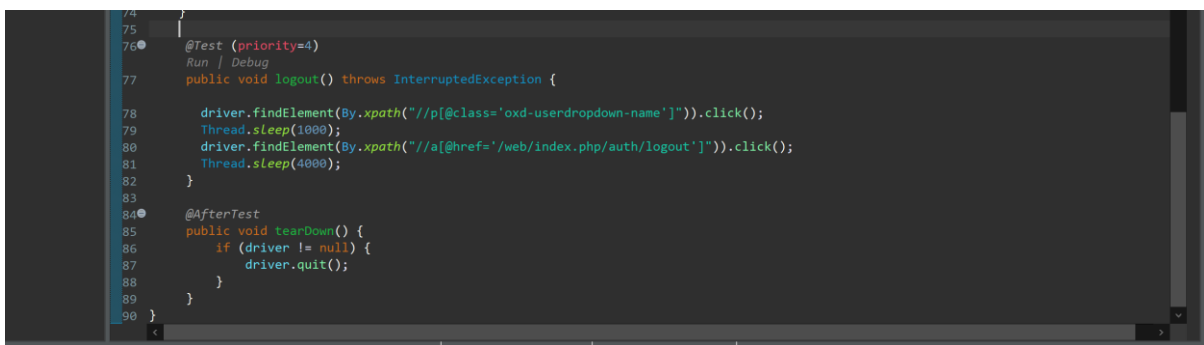## Automation Script:

Eclipse IDE code

```
52          // Clicking on save button
53          driver.findElement(By.xpath("//button[@type='submit']")).click();
54          Thread.sleep(1000);
55      }
56
57●     @Test (priority=3)
        Run | Debug
58      public void SearchEmployeeTest() throws InterruptedException {

59          // Clicking on Employee list
60          driver.findElement(By.linkText("Employee List")).click();
61          Thread.sleep(1000);
62          // Entering Employee name
63          driver.findElement(By.xpath("(//input[@placeholder='Type for hints...'])[1]")).sendKeys("Rahul M Sharma");
64          Thread.sleep(1000);
65          // Clicking on search button
66          driver.findElement(By.xpath("//button[@class='oxd-button oxd-button--medium oxd-button--secondary orangehrm-left-space']")).click(
67          Thread.sleep(1000);
68          // scroll down the window
69          JavascriptExecutor js=( JavascriptExecutor )driver;
70          js.executeScript("window.scrollBy(0,400);");
71          Thread.sleep(2000);
72          js.executeScript("window.scrollBy(0,-400);");
73          Thread.sleep(5000);
74      }
```



```
74      }
75
76●     @Test (priority=4)
        Run | Debug
77      public void logout() throws InterruptedException {

78          driver.findElement(By.xpath("//p[@class='oxd-userdropdown-name']")).click();
79          Thread.sleep(1000);
80          driver.findElement(By.xpath("//a[@href='/web/index.php/auth/logout']")).click();
81          Thread.sleep(4000);
82      }
83
84●     @AfterTest
85      public void tearDown() {
86          if (driver != null) {
87              driver.quit();
88          }
89      }
90  }
```

Class Name: OrangeHRMAutomation

- **Purpose:** Automate actions in the OrangeHRM web application.
- **WebDriver:** Uses ChromeDriver as the browser driver.

Methods in OrangeHRMAutomation class

1. setUp()

a. Initializes WebDriver.

b. Maximizes browser window and sets implicit wait.

b. LoginTest()

a. Logs into the OrangeHRM application.

b. Uses explicit waits with Thread.sleep() to handle element loading**.**

c. AddEmployeeTest()

a. Navigates to the "PIM" section.

b. Fills in employee details (first name, middle name, last name, and ID).

c. Submits the employee information**.**

d.SearchEmployeeTest()

a. Searches for an employee by ID in the "Employee List."

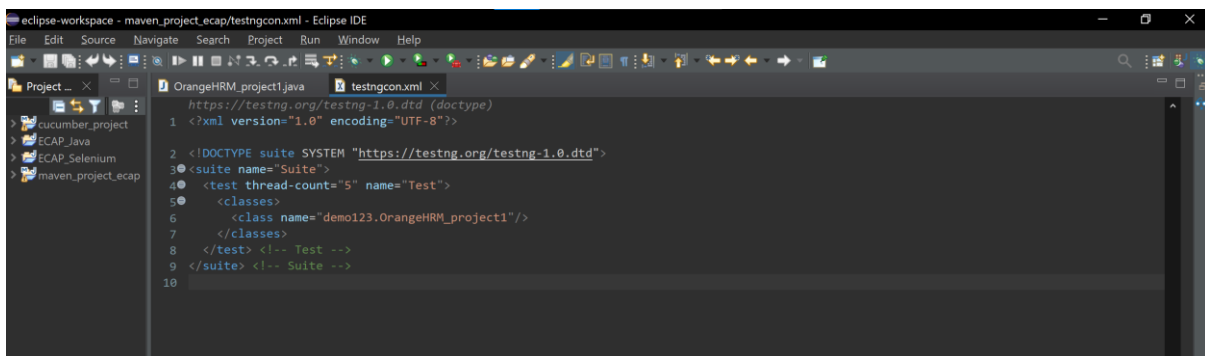b. Scrolls to view employee details using JavaScriptExecutor.

e. logoutTest()

a. Logs out of the OrangeHRM application.

f. tearDown()

a. Quits the WebDriver instance after tests are completed.
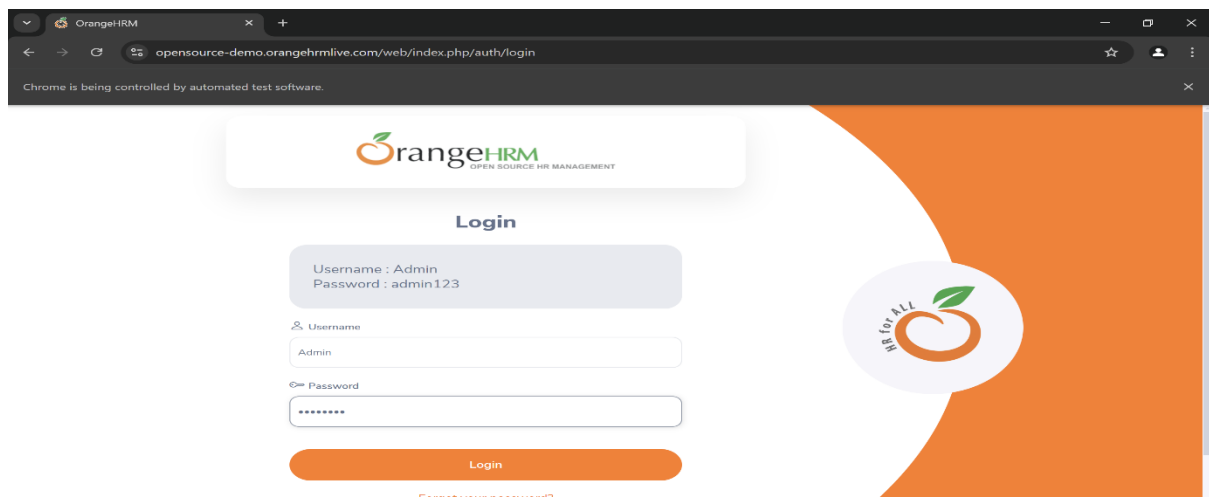
XML script:

XML Configuration: testngOrangeHRM.xml

- **Defines a suite with a test class (demo123.OrangeHRM_project1).**
- **thread-count is set to 5 for parallel execution if needed.**

Output of above code:

i.   **Logging into the OrangeHRM application.**

ii. **Clicking on PIM module in side menu bar and in PIM clicking on the Add employee module**

iii. **Adding the "First Name", "MiddleName", "Last Name" and "Employee ID" of the em[ployee and clicking on "Save"**

iv. **Searching for the added employee details in Employee List and verifying if the new employee details are added or not by entering "Employee ID" in Employee list and Click on search button.**

v. **The result record shows the Employee details we searched for in Employee list**

vi. **Now performing logout functionality by clicking on profile image, it will open the menu in which the list of options will be there in which we click on logout. And the application Successfully logs out.**
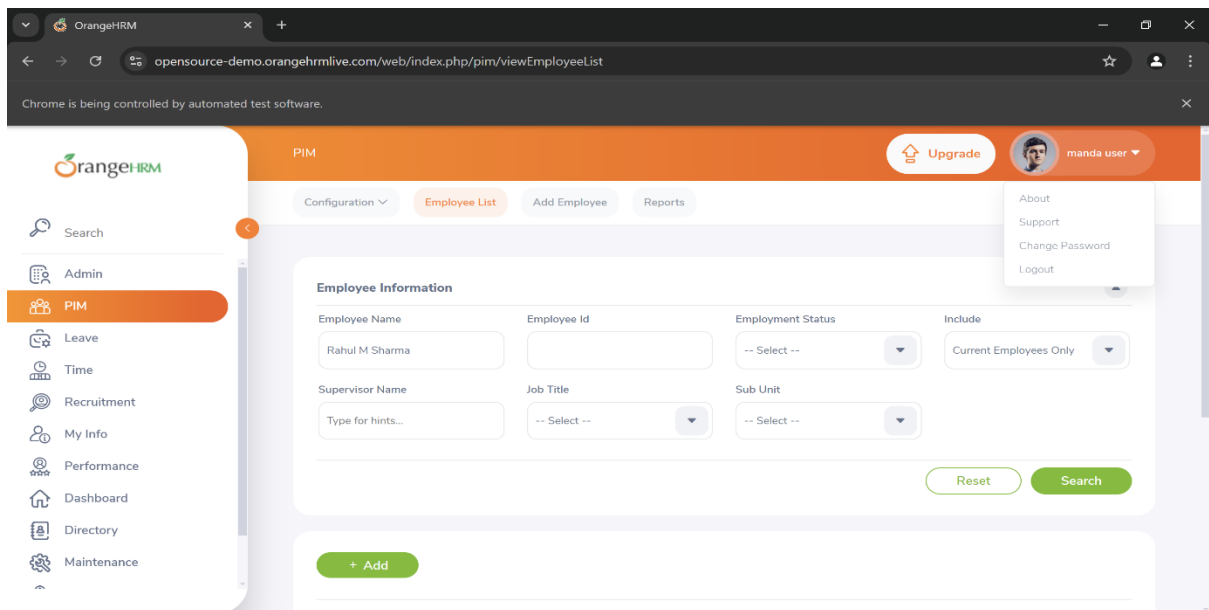
Console output:

The below console output shows that the 4 test cases have been passed.
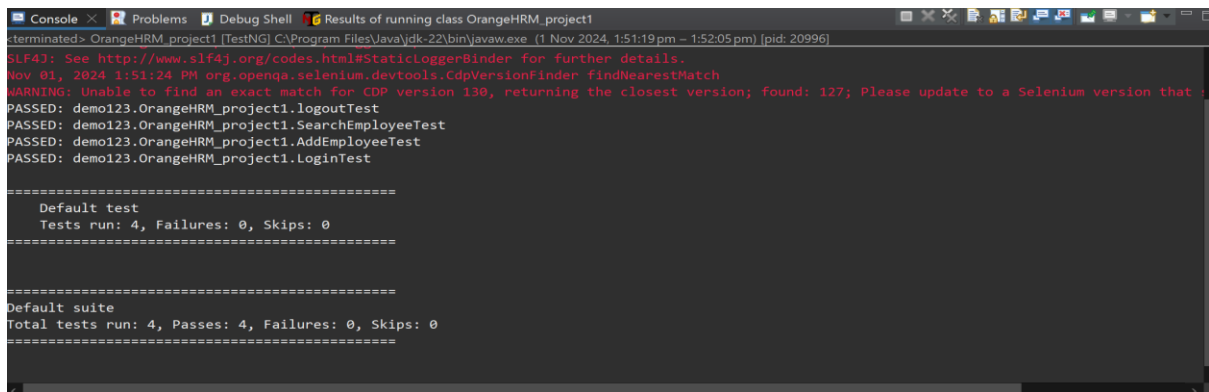
TestNG output:
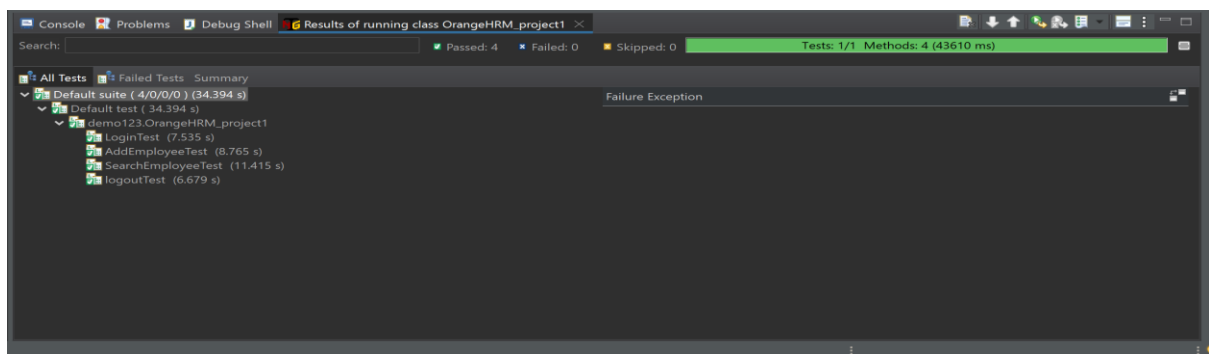
CODE:

```java
package demo123;

import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;
import org.testng.annotations.*;

public class OrangeHRM_project1 {
    public WebDriver driver;

    @BeforeTest
    public void setup() throws InterruptedException {
        driver = new ChromeDriver();
        // Maximize the window
        driver.manage().window().maximize();
        // Launching the URL
        driver.get("https://opensource-demo.orangehrmlive.com/web/index.php/auth/login");
        Thread.sleep(1000);
    }

    @Test (priority=1)
    public void LoginTest() throws InterruptedException {
        // Entering the user name
        driver.findElement(By.xpath("//input[contains(@name,'username')]")).sendKeys("Admin");
        Thread.sleep(1000);
        // Entering the password

driver.findElement(By.xpath("//input[contains(@name,'password')]")).sendKeys("admin123");
        Thread.sleep(1000);
        // Clicking on login button
```

```java
      driver.findElement(By.xpath("//button[@type='submit']")).click();

      Thread.sleep(5000);

}


@Test (priority=2)
public void AddEmployeeTest() throws InterruptedException {
   // Navigate to PIM module
   driver.findElement(By.xpath("//span[text()='PIM']")).click();

   Thread.sleep(1000);

   // Clicking on add employee
   driver.findElement(By.linkText("Add Employee")).click();

   Thread.sleep(1000);

   // Entering the first name
   driver.findElement(By.xpath("//input[@name='firstName']")).sendKeys("Rahul");

   Thread.sleep(1000);

   // Entering the middle name
   driver.findElement(By.xpath("//input[@name='middleName']")).sendKeys("M");

   Thread.sleep(1000);

   // Entering the last name
   driver.findElement(By.xpath("//input[@name='lastName']")).sendKeys("Sharma");

   Thread.sleep(1000);

   // Clicking on save button
   driver.findElement(By.xpath("//button[@type='submit']")).click();

   Thread.sleep(1000);

}


@Test (priority=3)
public void SearchEmployeeTest() throws InterruptedException {
 // Clicking on Employee list
   driver.findElement(By.linkText("Employee List")).click();

   Thread.sleep(1000);

   // Entering Employee name
```

```java
    driver.findElement(By.xpath("(//input[@placeholder='Type for
hints...'])[1]")).sendKeys("Rahul M Sharma");

    Thread.sleep(1000);

    // Clicking on search button

    driver.findElement(By.xpath("//button[@class='oxd-button oxd-button--medium oxd-button--
secondary orangehrm-left-space']")).click();

    Thread.sleep(1000);

    // scroll down the window

    JavascriptExecutor js=( JavascriptExecutor )driver;

    js.executeScript("window.scrollBy(0,400);");

    Thread.sleep(2000);

    js.executeScript("window.scrollBy(0,-400);");

    Thread.sleep(5000);

  }


  @Test (priority=4)
  public void logout() throws InterruptedException {
    driver.findElement(By.xpath("//p[@class='oxd-userdropdown-name']")).click();
    Thread.sleep(1000);
    driver.findElement(By.xpath("//a[@href='/web/index.php/auth/logout']")).click();
    Thread.sleep(4000);
  }


  @AfterTest
  public void tearDown() {
    if (driver != null) {
      driver.quit();
    }
  }
}
```