Web Testing Automation Manual

Abu Md Salahuddin

Email: sbappy88@gmail.com

Mobile: 01835861139

Title: Web Testing Automation using Selenium and Java

Test Tools used:

- **IDE**: IntelliJ IDEA
- **Script language**: Java
- **Selenium**: latest version
- **Browser**: both Firefox and Chrome
- **Testing Framework**: JUnit

GitHub Link: https://github.com/sbappy88/CNSBD.git

GitHub Folder Structure:

- **.idea folder**: contains project specific settings configuration files
- **src folder**: contains project main java file, configuration and Util files
- **Resources/Data folder**: contains project test data in cfg file
- **target folder**: contains project compiled class files
- **TestCase folder**: contains web application test cases and bugs report within the tab

How to run main java file and path:

- **File name:** WebTest.java
- **File path:** src/test/java/com/WebTest.java
- **Run file:** right click and then Run as > Java application

WebTest java file description:

- Browser setup for Firefox or Chrome

```java
@Before
public void setUp() {
System.setProperty("webdriver.gecko.driver","C:\\geckodriver.exe");
    WebDriverManager.firefoxdriver().setup();
driver = new FirefoxDriver();
js = (JavascriptExecutor) driver;
vars = new HashMap<String, Object>();

    //Please uncomment if wants to test in Chrome browser
    // System.setProperty("webdriver.chrome.driver","C:\\chromedriver.exe");
    //WebDriverManager.chromedriver().setup();
    //driver = new ChromeDriver();

    driver.manage().window().maximize();

    //Test case id: TC_01 verify Open the web aplication
String url= "http://123.200.20.20:5302/";
driver.get(url);

}
```

- Run all the test cases under the main function

```
/**
        * Function Name: main
        * Description: this is main function which will execute all test cases one by one
        * Parameters: None
        *
*/
@Test
public void main () throws Exception{

    try {

        // Initialize data
        MainInitData.preCheckExec();
        loginInitdata = MainInitData.getInstance();
        LoginlInitData.preCheckExec();
        loginData = LoginlInitData.getInstance();
        scriptMgmt = ScriptsMgmt.getInstance();
        logger = Logger.getInstance();
        InitData.setScriptName("com.WebTest");
        scriptMgmt.logHeader(InitData.scriptName);

        // Execute all test case Sequentially
        CircularSearch(); // Test Case ID: TC_02
        JobApplyNow(); // Test Case ID: TC_03, TC_06, TC_07 and TC_08
        BasicInformation(); // Test Case ID: TC_09, TC_10
        Address(); // Test Case ID: TC_11
        Education(); // Test Case ID: TC_12
        JobExperience(); // Test Case ID: TC_13
        Certificate(); // Test Case ID: TC_14
        Complete(); // Test Case ID: TC_15

    }catch (Exception e)
    {
        e.printStackTrace();
        //scriptMgmt.logFail_stop_sendmail(InitData.scriptName,e);
    }
}//login
```

- Single Test case Function description and Inline comments

```
/**
     * Function Name: CircularSearch
     * Description: this function will click on a specific circular and then apply for job without login
     * Test Case reference number: TC_03, TC_06, TC_07 and TC_08
     * Parameters: None
     *
*/
public void JobApplyNow() throws Exception{
  vars.put("window_handles", driver.getWindowHandles());
  driver.findElement(By.linkText("14/2023")).click();

  //Switch between browser tabs using Selenium WebDriver
  driver.getWindowHandles().forEach(tab->driver.switchTo().window(tab));
  assertTrue(driver.findElement(By.id("circularDtl")).isDisplayed());

 //Click on the Action icon
  driver.findElement(By.cssSelector(".bx-show")).click();
  //Click on the Apply Now button
  driver.findElement(By.cssSelector("strong")).click();
  //Click on the Continue without Login button
  driver.findElement(By.linkText("Continue without Login")).click();

}//End of JobApplyNow
```