

# Selenium Class 22 - Selenium Test Environment Setup

## i) Selenium Test Environment Setup

First choose Selenium Tools and Other Components for Testing,

Example: Eclipse IDE for writing Test Scripts, Java for programming, TestNG as Test Runner.....

### Steps:

- 1) Download & Install Java Software (JDK) - create and execute programs/test scripts
- 2) Set Environment Variable path (Path variable) - to use Java software from any directory
- 3) Download Eclipse IDE and extract - to write and execute Java programs, add software components...
- 4) Download Selenium WebDriver Java language binding (from [www.seleniumhq.org](http://www.seleniumhq.org)) and add WebDriver jar files to Java project in Eclipse IDE.
- 5) Download Browser driver/s and set browser path in test cases (instantiate Browser driver)

.....

**Navigation to add Selenium jar files to Java Project in Eclipse IDE,**

- Launch Ellipse IDE
- Create Java Project /Select Java Project and right Click
- Build path
- Configure Build path
- Select "Libraries" tab
- Add "External jars"
- Browse path of the WebDriver jar files and Add
- OK

.....

**ii) Write first Selenium Test Case & Execute**

**Manual Test Case:**

Test Case ID: gcrShop\_admin\_TC001

Test Case Name: Verify Admin Login into gcrShop Application Admin Interface

***Test Steps:***

- 1) Launch Browser
- 2) Navigate to gcrShop Admin Interface ("http://www.gcrit.com/build3/admin/")
- 3) Enter valid Username
- 4) Enter valid Password
- 5) Click Login

.....

Input Data: admin

Password: admin@123

Verification Point:

Capture the current URL after Login and compare with expected

Expected URL: http://www.gcrit.com/build3/admin/index.php

Actual: \* After Execution

Test Result: Pass/Fail (\* After Execution)

.....

**Inspect Elements:**

- i) Username - Edit Box - name - username
- ii) Password - Edit Box - name - password
- iii) Login - Button - id- tdb1

.....

***Download Browser driver/s and Instantiate in your Test Case***

**a) Admin Login Test Case using Google Chrome Browser**

```
public class AdminLogin {  
  
    public static void main(String[] args) throws InterruptedException {  
        //Instantiate Chrome Browser Driver  
        System.setProperty("webdriver.chrome.driver", "E:/chromedriver.exe");  
    }  
}
```

```
//Create Chrome Browser Driver
WebDriver driver = new ChromeDriver();
driver.manage().window().maximize();

driver.get("http://www.gcrit.com/build3/admin/");
driver.findElement(By.name("username")).sendKeys("admin");
driver.findElement(By.name("password")).sendKeys("admin@123");
driver.findElement(By.id("tdb1")).click();
Thread.sleep(3000);
String url = driver.getCurrentUrl();

if (url.contains("http://www.gcrit.com/build3/admin/index.php")){
System.out.println("Admin Login is Successful -Passed");
}
else
{
System.out.println("Admin Login is Unsuccessful - Failed");
}
driver.close();

}
}
```

.....

**b) Admin Login Test Case using Mozilla Firefox Browser**

```
public class AdminLogin {

    public static void main(String[] args) throws InterruptedException {
        //Instantiate Mozilla Firefox Browser Driver
        System.setProperty("webdriver.gecko.driver", "E:/geckodriver.exe");
        //Create Mozilla Firefox Browser Driver
        WebDriver driver = new FirefoxDriver();
        driver.manage().window().maximize();

        driver.get("http://www.gcrit.com/build3/admin/");
        driver.findElement(By.name("username")).sendKeys("admin");
        driver.findElement(By.name("password")).sendKeys("admin@123");
        driver.findElement(By.id("tdb1")).click();
        Thread.sleep(3000);
        String url = driver.getCurrentUrl();

        if (url.contains("http://www.gcrit.com/build3/admin/index.php")){
            System.out.println("Admin Login is Successful -Passed");
        }
        else
        {
            System.out.println("Admin Login is Unsuccessful - Failed");
        }
        driver.close();
    }
}
```

```
}  
}
```

.....

### **c) Admin Login Test Case using MS Edge Browser**

```
public class AdminLogin {  
  
    public static void main(String[] args) throws InterruptedException {  
        //Instantiate MS Edge Browser Driver  
        System.setProperty("webdriver.edge.driver", "E:/MicrosoftWebDriver.exe");  
        //Create MS Edge Browser Driver  
        WebDriver driver = new EdgeDriver();  
        //driver.manage().window().maximize();  
  
        driver.get("http://www.gcrit.com/build3/admin/");  
        driver.findElement(By.name("username")).sendKeys("admin1");  
        driver.findElement(By.name("password")).sendKeys("admin@123");  
        driver.findElement(By.id("tdb1")).click();  
        Thread.sleep(3000);  
        String url = driver.getCurrentUrl();  
  
        if (url.contains("http://www.gcrit.com/build3/admin/index.php")){  
            System.out.println("Admin Login is Successful -Passed");  
        }  
        else  
        {  
            System.out.println("Admin Login is Unsuccessful - Failed");  
        }  
    }  
}
```

```
}  
driver.close();
```

```
}  
}
```

.....