Handling the Test Data and Executing It in Multiple Environments for Bus Ticket Booking Application.

SOURCE CODE

TestBase:

```
package redbusProject.Base;
import java.awt.Desktop;
import java.io.File;
import java.io.IOException;
import java.lang.reflect.Method;
import java.time.Duration;
import org.openga.selenium.WebDriver;
import org.openga.selenium.chrome.ChromeDriver;
import org.testng.ITestContext;
import org.testng.ITestResult;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.AfterSuite;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.BeforeTest;
import com.aventstack.extentreports.ExtentReports;
import com.aventstack.extentreports.ExtentTest;
import
com.aventstack.extentreports.reporter.ExtentSparkReporter;
public class TestBase {
     //Base class indicates the driver session and Application
details
     public static WebDriver driver;
     public static ExtentReports extentreports;
     public static ExtentTest extentTest;
     public static void openBrowser(String browser) {
          driver = new ChromeDriver();
          driver.manage().window().maximize();
```

```
driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(5))
));
          driver.get("https://www.redbus.in/");
     }
     @BeforeTest
     public void getnameMethod(ITestContext context) {
          extentTest =
extentreports.createTest(context.getName());
     }
     @BeforeSuite // this method will be excuted before suite
begins its execution
     public void InitalizeExtentReport() {
          ExtentSparkReporter sparkreporter = new
ExtentSparkReporter("register_user_report1.html");
          extentreports = new ExtentReports();
          extentreports.attachReporter(sparkreporter);
          // on the report display more information about OS,
browser, java etc
          extentreports.setSystemInfo("OS",
System.getProperty("os.name"));
          extentreports.setSystemInfo("JAVA",
System.getProperty("java.version"));
     }
     @AfterSuite
     public void generateReports() throws IOException {
          extentreports.flush();
          Desktop.getDesktop().browse(new
File("register user report1.html").toURI());
     }
     @AfterMethod
     public void generateTestStatus(Method m, ITestResult
result) {
          if (result.getStatus() == ITestResult.FAILURE) {
               System.out.println("Capture Screenshot");
               extentTest.fail(result.getThrowable());
          } else if (result.getStatus() ==
ITestResult.SUCCESS) {
               extentTest.pass(m.getName() + " is passed");
     }
}
```

Home page:

```
package redbusProject.pages;
import org.openga.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
public class Homepage {
     //WebDriver driver;
     //create pagefactory
     @FindBy(xpath = "//span[text()='Account']")
     WebElement myaccount;
     @FindBy(xpath = "//span[text()='Login/ Sign Up']")
     WebElement signup;
     @FindBy(id="cab rental vertical")
     WebElement cabRental;
     @FindBy(id="rail tickets vertical")
     WebElement TrainTickets;
     public Homepage(WebDriver driver) {
          PageFactory.initElements(driver, this);
     //Actions
     public void clickOnMyAccount() {
          myaccount.click();
     }
     public void clickOnSignup() {
          signup.click();
     }
     public void clickOnCabRental() {
          cabRental.click();
```

```
public void clickOntrainTicket() {
         TrainTickets.click();
______
SearchBusPage:
package redbusProject.pages;
import org.openga.selenium.WebDriver;
import org.openga.selenium.WebElement;
import org.openqa.selenium.support.FindBy;
import org.openqa.selenium.support.PageFactory;
public class SearchBusPage {
    @FindBy(id = "src")
    private WebElement fromLocation;
    @FindBy(id = "dest")
    private WebElement toLocation;
    @FindBy(className = "dateText")
    private WebElement date;
    @FindBy(xpath = "(//span[normalize-space()='26'])")
    private WebElement selectDate;
    @FindBy(id = "search button")
    private WebElement clickSearch;
    public SearchBusPage(WebDriver driver) {
         PageFactory.initElements(driver, this);
     }
    public void clickFrom(String from) {
         fromLocation.sendKeys(from);
    public void clickTo(String to) {
         toLocation.sendKeys(to);
    public void clickDate() {
         date.click();
    public void selectDateFromCalendar() {
         selectDate.click();
    public void searchBuses() {
         clickSearch.click();
```

```
}
}
_____
NavigateTest:
package redbusProject.Testpages;
import org.testng.annotations.AfterClass;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.Test;
import redbusProject.Base.TestBase;
import redbusProject.pages.Homepage;
public class NavigateTest extends TestBase {
    Homepage hp;
    @BeforeClass
    public void OpenApp() {
         openBrowser("Chrome");
         hp = new Homepage(driver);
    @Test(priority = '1')
    public void clickOnAccount() throws InterruptedException
{
         Thread. sleep (2000);
         hp.clickOnMyAccount();
         Thread. sleep (2000);
     }
    @Test(priority = '2')
    public void clickOncabrental() throws
InterruptedException {
         hp.clickOnCabRental();
         Thread. sleep (3000);
     }
    @AfterClass
    public void CloseApp() {
```

```
driver.quit();
}
AccountPageTest:
package redbusProject.Testpages;
import org.testng.annotations.AfterClass;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.Test;
import redbusProject.Base.TestBase;
import redbusProject.pages.Homepage;
public class AccountPageTest extends TestBase {
     Homepage hp;
     @BeforeClass
     public void OpenApp() {
          openBrowser("Chrome");
          hp = new Homepage(driver);
     }
     @Test
     public void clickOnSignUpPage() throws
InterruptedException {
          Thread. sleep (2000);
          hp.clickOnMyAccount();
          Thread. sleep (5000);
          hp.clickOnSignup();
          Thread. sleep (5000);
     }
     @AfterClass
     public void CloseApp() {
          driver.quit();
```

```
BookBusTicketTest:
package redbusProject.Testpages;
import org.testng.annotations.AfterClass;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.Test;
import redbusProject.Base.TestBase;
import redbusProject.pages.SearchBusPage;
public class BookBusTicketTest extends TestBase {
      SearchBusPage Sp;
      @BeforeClass
     public void OpenApp() {
          openBrowser("Chrome");
          Sp = new SearchBusPage(driver);
     @Test
     public void SearchBus() throws InterruptedException {
          String from = "Mumbai";
          String to = "Pune";
          Sp.clickFrom(from);
          Sp.clickTo(to);
          Sp.clickDate();
          Sp.selectDateFromCalendar();
          Sp.searchBuses();
          Thread. sleep (5000);
     }
     @AfterClass
     public void CloseApp() {
          driver.quit();
}
```

TestNGRunner.xml