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

SOURCE CODE

Test Base:

```
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.openqa.selenium.WebDriver; import
org.openqa.selenium.chrome.ChromeDriver; import
org.testng.ITestContext; import org.testng.ITestResult;
importorg.testng.annotations.AfterMethod; import
org.testng.annotations.AfterSuite;
importorg.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 {
       //BaseclassindicatesthedriversessionandApplication 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//thismethodwillbeexcutedbeforesuite begins its execution public
void InitalizeExtentReport() {
              ExtentSparkReportersparkreporter=new
```

```
ExtentSparkReporter("register user report1.html"); extentreports = new ExtentReports();
              extentreports.attachReporter(sparkreporter);
              //onthereportdisplaymoreinformationaboutOS,
                                                               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());
       (a)AfterMethod
       publicvoidgenerateTestStatus(Methodm,ITestResult result)
{ if(result.getStatus()==ITestResult.FAILURE){ System.out.println("Capture
              Screenshot"); extentTest.fail(result.getThrowable());
              }elseif(result.getStatus()==
ITestResult.SUCCESS) { extentTest.pass(m.getName() + " is passed"); }
}
Homepage: package
redbusProject.pages;
import org.openqa.selenium.WebDriver; import
org.openga.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/SignUp']") 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
publicvoidclickOnMyAccount(){
       myaccount.click();
publicvoidclickOnSignup(){ signup.click();
publicvoidclickOnCabRental(){
       cabRental.click();
       publicvoidclickOntrainTicket(){
              TrainTickets.click();
SearchBusPage:
package redbusProject.pages;
import org.openqa.selenium.WebDriver; import
org.openqa.selenium.WebElement; import
org.openqa.selenium.support.FindBy; import
org.openqa.selenium.support.PageFactory;
publicclassSearchBusPage{ @FindBy(id
       = "src")
       privateWebElementfromLocation; @FindBy(id =
       "dest") private WebElement toLocation;
       @FindBy(className="dateText") private
       WebElement date;
       @FindBy(xpath= "(//span[normalize-space()='26'])")
       privateWebElementselectDate;
       @FindBy(id = "search button") private WebElement
       clickSearch;
public SearchBusPage(WebDriver driver) {
              PageFactory.initElements(driver,this); }
publicvoidclickFrom(Stringfrom){
       fromLocation.sendKeys(from);
```

```
publicvoidclickTo(Stringto){
       toLocation.sendKeys(to);
publicvoidclickDate(){ date.click();
publicvoidselectDateFromCalendar(){ selectDate.click();
publicvoidsearchBuses(){
       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;
publicclassNavigateTestextendsTestBase{ Homepage hp;
       @BeforeClass public void
       OpenApp() {
openBrowser("Chrome"); hp = new
              Homepage(driver);
       }
       \textcircled{a}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;
importorg.testng.annotations.BeforeClass; import
org.testng.annotations.Test;
import redbusProject.Base.TestBase; import
redbusProject.pages.Homepage;
publicclassAccountPageTestextendsTestBase{ 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;
importorg.testng.annotations.BeforeClass; import
org.testng.annotations.Test;
import redbusProject.Base.TestBase; import
redbusProject.pages.SearchBusPage;
publicclassBookBusTicketTestextendsTestBase{
        SearchBusPage Sp;
        @BeforeClass public void OpenApp() {
       openBrowser("Chrome"); Sp = new
       SearchBusPage(driver);
       @Test
publicvoidSearchBus()throwsInterruptedException{ 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