git clone <https://github.com/AbinashB/BDD.git>

**Pre Setup BDD Instruction**

1. Download Community version intelliJ and install it.

Link: <https://www.jetbrains.com/idea/download/#section=mac>

1. Install maven. Command - brew install maven
2. Install java Version 8 Update 131
3. Chrome browser should be installed
4. Download chromedriver and place into bin folder (cd /usr/local/bin)

Chromedriver: <https://chromedriver.storage.googleapis.com/index.html?path=2.29/> (select mac64 bits)

**Setup Project in intellij**

1. Create a new maven project in intellij
2. Give groupid ,artifactid and project name
3. Open pom.xml and update below dependency

<dependencies>

<dependency>

<groupId>net.serenity-bdd</groupId>

<artifactId>serenity-core</artifactId>

<version>1.4.0</version>

</dependency>

<dependency>

<groupId>net.serenity-bdd</groupId>

<artifactId>serenity-junit</artifactId>

<version>1.4.0</version>

</dependency>

<dependency>

<groupId>org.slf4j</groupId>

<artifactId>slf4j-simple</artifactId>

<version>1.6.1</version>

</dependency>

<dependency>

<groupId>net.serenity-bdd</groupId>

<artifactId>serenity-cucumber</artifactId>

<version>1.1.30</version>

</dependency>

</dependencies>

4. Click on Import all changes,it will download the required jar into project.

5. Create a new java class (**SimpleSerenityTest**

) under test->java folder

**Requirement** : open cleartrip website then click on Flights link , then assert in the tag “flights” is present in header.

**Code**:

@RunWith(SerenityRunner.**class**)

**public class SimpleSerenityTest**

{

@Managed(driver = **"chrome"**)

WebDriver **driver**;

@Test

**public void** startUp() **throws** InterruptedException {

WebElement element;

String link\_name=**"Flights"**;

**driver**.get(**"http://cleartrip.com"**);

**driver**.findElement(By.*linkText*(link\_name)).click();

element= **driver**.findElement((By.*id*(**"SearchForm"**))).findElement(By.*tagName*(**"h1"**));

Assert.*assertTrue*(element.getText().contains(link\_name.toLowerCase()));

}

}

6. Create a new java class (**SerenityDataDrivenTest**) under test->java folder

**Requirement** : open cleartrip website then click on all links using data provider , then assert in the tag “text” is present.

**Code**:

@RunWith(SerenityParameterizedRunner.**class**)

**public class SerenityDataDrivenTest**

{

@Managed(driver = **"chrome"**)

WebDriver **driver**;

**private final** String **link\_name**;

@TestData

**public static** Collection<Object[]> testData(){

**return** Arrays.*asList*(**new** Object[][]{

{**"Flights"**},

{**"Hotels"**},

{**"Flight + Hotel"**},

{**"Trains"**}

});

}

**public** Test2(String link\_name) {

**this**.**link\_name** = link\_name;

}

@Test

**public void** startUp() **throws** InterruptedException {

WebElement element;

**driver**.get(**"http://cleartrip.com"**);

**driver**.findElement(By.*linkText*(**link\_name**)).click();

element= **driver**.findElement((By.*id*(**"Home"**))).findElement(By.*tagName*(**"h1"**));

Assert.*assertTrue*(element.getText().contains(**link\_name**.toLowerCase()));

}

}

7. Same Scenario using **Page Objects Model**

Create and package: pages under java folder. Then create a pageobject class (example : **ClearTripHomePage**)

Write below code under this page object

**Code**:

@DefaultUrl(**"http://cleartrip.com"**)

**public class** ClearTripHomePage **extends** PageObject {

@FindBy(linkText=**"Flights"**)

WebElement **flightSelection**;

@FindBy(tagName=**"h1"**)

WebElementFacade **headerText**;

**public** String getTextFromTheLink() {

**headerText**.isDisplayed();

String text= **headerText**.getText();

**return** text;

}

**public void** clickOnFlightLink(){

**flightSelection**.click();

}

}

Create test script class with name : **SerenityPageObjectTest**

Use page object created earlier in this class

**Code**:

@RunWith(SerenityRunner.**class**)

**public class SerenityPageObjectTest**

{

@Managed(driver = **"chrome"**)

WebDriver **driver**;

ClearTripHomePage **homepage**;

@Test

**public void** startUp() **throws** InterruptedException {

String headertext;

String link\_name=**"Flight"**;

**homepage**.open();

**homepage**.clickOnFlightLink();

headertext=**homepage**.getTextFromTheHeader();

Assert.*assertTrue*(headertext.contains(link\_name.toLowerCase()));

}

}

8. Use of Given,When and Then using Serenity

Create a class in test->java folder with a name (**SerenityPageObjectTest**.java)

**Code**:

@RunWith(SerenityRunner.**class**)

**public class** SerenityPageObjectTest {

@Managed(driver = **"chrome"**)

WebDriver **driver**;

ClearTripHomePage **homepage**;

@Test

**public void** serenityPageObjectTest() **throws** InterruptedException {

String headertext;

String link\_name=**"Flight"**;

**homepage**.open();

**homepage**.clickOnFlightLink();

headertext=**homepage**.getTextFromTheHeader();

Assert.*assertTrue*(headertext.contains(link\_name.toLowerCase()));

}

}

9 . **Scenario**: Search for one way flight options from Hyderabad to Banglore

Create a package in java folder named : **features**.

Inside features package create new file named as **OneWayFlightReservation**.feature.

Write **scenario**:

**Feature:** One way flight reservation

@Smoke

**Scenario:** Search for one way flight options from Hyderabad to Banglore

**Given** I navigate to the cleartrip homepage

**And** I select flight with "**Hyderabad, IN**" and "**Bangalore, IN**" options

**When** I click on search flights

**Then** list of flight options will be visible

Write its steps in another class

Create another java class under test->java named **StepDefinatons**.java

**Code**:

**public class** StepDefinitions **extends** RunnerClassTest {

@Given(**"^I navigate to the cleartrip homepage$"**)

**public void** i\_navigate\_to\_the\_cleartrip\_homepage() **throws** Throwable {

**driver**.get(**"https://cleartrip.com"**);

}

@When(**"^I click on search flights$"**)

**public void** click\_on\_search\_flights() **throws** Throwable {

**driver**.findElement(By.*cssSelector*(**"#SearchBtn"**)).click();

}

@Then(**"^list of flight options will be visible$"**)

**public void** the\_shipping\_cost\_should\_be\_included\_in\_the\_total\_price() **throws** Throwable {

waitForAppReady(By.*cssSelector*(**".progressTracker"**));

Assert.*assertNotNull*(**driver**.findElement(By.*cssSelector*(**".resultsContainer"**)));

}

@When(**"^I select flight with \"([^\"]\*)\" and \"([^\"]\*)\" options$"**)

**public void** select\_flight\_from\_and\_to\_options(String arg1, String arg2) **throws** Throwable {

**driver**.findElement(By.*cssSelector*(**"#FromTag"**)).sendKeys(arg1);

**driver**.findElement(By.*cssSelector*(**"#ToTag"**)).sendKeys(arg2);

**driver**.findElement(By.*cssSelector*(**"#DepartDate"**)).sendKeys(getDate(1), Keys.***TAB***);

}

**public** String getDate(**int** Days){

Calendar cal = Calendar.*getInstance*();

cal.add(Calendar.***DATE***, Days);

SimpleDateFormat simple = **new** SimpleDateFormat(**"dd/MM/yyyy"**);

**return** simple.format(cal.getTime());

}

**public void** waitForAppReady(org.openqa.selenium.By locator){

**try**{

WebDriverWait wait = **new** WebDriverWait(**driver**,30);

wait.until(ExpectedConditions.*invisibilityOfElementLocated*(locator));

Thread.*sleep*(1000);

}

**catch** (Exception e){

System.***out***.println(**"Element with locator: "**+locator+**"not loaded:-"**+e.getMessage());

}

}

}

Now To run it .create a runner class in test->java named: **RunnerClassTest**

Code:

@RunWith(CucumberWithSerenity.**class**)

@CucumberOptions(features = { **"src/test/java/features/OneWayFlightReservation.feature"** },

tags = {**"@Reg"**})

**public class** RunnerClassTest {

@Managed(driver = **"chrome"**)

WebDriver **driver**;

}

10 . **Scenario**: Search for round trip flights

Inside features package create new file named as **TwoWayFlightReservation**.feature

**Feature:** Two way flight reservation

@Smoke

**Scenario Outline:** Search for round trip flights from the table

**Given** I navigate to the cleartrip homepage

**And** choose the round trip option

**And** I select round flights with "**<From>**" and "**<To>**" options

**When** I click on search flights

**Then** list of flight options will be visible

**Examples:**

**|***From* **|***To* **|**

**|New Delhi |Hyderabad, IN|**

**|Mumbai |New Delhi |**

Add belows new steps into the **StepDefinitions** class

@Given(**"^choose the round trip option$"**)

**public void** choose\_the\_round\_trip\_option() **throws** Throwable {

*// Write code here that turns the phrase above into concrete actions*

**driver**.findElement(By.*cssSelector*(**"#RoundTrip"**)).click();

}

@When(**"^I select round flights with \"([^\"]\*)\" and \"([^\"]\*)\" options$"**)

**public void** selects\_flights\_with\_options(String arg1, String arg2) **throws** Throwable {

**driver**.findElement(By.*cssSelector*(**"#FromTag"**)).sendKeys(arg1);

**driver**.findElement(By.*cssSelector*(**"#ToTag"**)).sendKeys(arg2);

**driver**.findElement(By.*cssSelector*(**"#DepartDate"**)).sendKeys(getDate(1), Keys.***TAB***);

**driver**.findElement(By.*cssSelector*(**"#ReturnDate"**)).sendKeys(getDate(4), Keys.***TAB***);

}

11. Run test In **Parallel**

Add below plugin in build tag

Add below plugins into pom.xml

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>2.19.1</version>

<configuration>

**<forkCount>1</forkCount>**

<reuseForks>true</reuseForks>

<testFailureIgnore>true</testFailureIgnore>

</configuration>

</plugin>

<plugin>

<groupId>net.serenity-bdd.maven.plugins</groupId>

<artifactId>serenity-maven-plugin</artifactId>

<version>1.3.0</version>

</plugin>

</plugins>

</build>

Command to run :

**mvn clean verify serenity:aggregate**