DateProvider:

Using DataProvider in TestNG, we can execute the same test with different sets of data.

It is commonly used in data-driven frameworks for testing with multiple inputs.

Syntax:

@DataProvider(name = "name of the data provider")

public Object[][] dataProviderfunc()

{

return new Object[][] { values }

}

* The DataProvider annotation has a single attribute called name, which you can select as per your convenience.
* DataProviders are separate methods used in test functions, which means that this annotation is not used on test functions like the TestNG parameters.
* The DataProvider method returns a 2D list of objects.
* If you don't provide a name for the DataProvider, the method name will automatically be used as the default identifier.

Test Scenario:

1.Launch the browser to open www.google.com

2.Search the first keyword combination.

3.Repeat the steps 2 for the other 2 keywords combination.

Search Key Words:

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S.NO Country Monument

1 India Qutub Minar

2 Agra Taj Mahal

3 Hyderabad Charminar

### **Code Example 1:**

#### ***When DataProvider method and test method are in the same class***

package tut7\_dataProviderDemo;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.annotations.DataProvider;

import org.testng.annotations.Test;

public class DataProviderDemo {

@DataProvider(name = "searchDataSet")

public Object[][] searchData() {

Object[][] search\_keywords = new Object[3][2];

search\_keywords[0][0] = "India";

search\_keywords[0][1] = "Qutub Minar";

search\_keywords[1][0] = "Agra";

search\_keywords[1][1] = "Taj Mahal";

search\_keywords[2][0] = "Hyderabad";

search\_keywords[2][1] = "Charminar";

return search\_keywords;

}

@Test(dataProvider = "searchDataSet")

public void testCaseGoogleSearch(String country, String monument) throws InterruptedException

{

WebDriver driver = new ChromeDriver();

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

driver.get("https://google.com");

WebElement searchBox = driver.findElement(By.name("q"));

searchBox.sendKeys(country + " " + monument);

WebElement submitButton = driver.findElement(By.name("btnK"));

submitButton.submit();

Thread.sleep(2000);

driver.quit();

}

}

### **Code Example 2:**

#### ***When the DataProvider method is in a different class***

package tut7\_dataProviderDemo;

import org.testng.annotations.DataProvider;

public class DataProviderMethod

{

@DataProvider(name = "searchDataSet")

public Object[][] searchData()

{

Object[][] search\_keywords = new Object[3][2];

search\_keywords[0][0] = "India";

search\_keywords[0][1] = "Qutub Minar";

search\_keywords[1][0] = "Agra";

search\_keywords[1][1] = "Taj Mahal";

search\_keywords[2][0] = "Hyderabad";

search\_keywords[2][1] = "Charminar";

return search\_keywords;

}

}

package tut7\_dataProviderDemo;

import org.openqa.selenium.By;

import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.testng.annotations.Test;

public class TakingDataFromDifferentClass

{

@Test(dataProvider = "searchDataSet", dataProviderClass = DataProviderMethod.class)

public void testCaseGoogleSearch(String country, String monument) throws InterruptedException {

WebDriver driver = new ChromeDriver();

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

driver.get("https://google.com");

WebElement searchBox = driver.findElement(By.name("q"));

searchBox.sendKeys(country + " " + monument);

WebElement submitButton = driver.findElement(By.name("btnK"));

submitButton.submit();

Thread.sleep(2000);

driver.quit();

}

}