* **Generating Extent Reports through customized Listeners:**

1. Create the Extent Report Manager class to create one instance of the Extent report.

**public** **class** ExtentManager {

1. Declare ExtentReports class.

**private** **static** ExtentReports *extent*;

1. Create an instance of the Extent Report. Here define the config and informations.

Initialize class ExtentHtmlReporter and define config. Before that create one instance of ExtentReports.

**public** **static** ExtentReports createInstance(String fileName) {

ExtentHtmlReporter htmlReporter = **new** ExtentHtmlReporter(fileName);

htmlReporter.config().setTheme(Theme.***STANDARD***);

htmlReporter.config().setDocumentTitle(fileName);

htmlReporter.config().setEncoding("utf-8");

htmlReporter.config().setReportName(fileName);

1. Create the Report and provide required infos:

*extent* = **new** ExtentReports();

*extent*.attachReporter(htmlReporter);

*extent*.setSystemInfo("Automation Tester", "Rahul Arora");

*extent*.setSystemInfo("Organization", "Way2Automation");

*extent*.setSystemInfo("Build no", "W2A-1234");

1. Return the extent report.

**return** *extent*;

}

* Create ExtentListeners class which implements ITestListener interface.

package extentlisteners;

import java.util.Arrays;

import java.util.Date;

import org.testng.ITestContext;

import org.testng.ITestListener;

import org.testng.ITestResult;

import com.aventstack.extentreports.ExtentReports;

import com.aventstack.extentreports.ExtentTest;

import com.aventstack.extentreports.Status;

import com.aventstack.extentreports.markuputils.ExtentColor;

import com.aventstack.extentreports.markuputils.Markup;

import com.aventstack.extentreports.markuputils.MarkupHelper;

public class ExtentListeners implements ITestListener {

static Date d = new Date();

static String fileName = "Extent\_" + d.toString().replace(":", "\_").replace(" ", "\_") + ".html";

private static ExtentReports extent = ExtentManager.createInstance(System.getProperty("user.dir")+"\\reports\\"+fileName);

public static ThreadLocal<ExtentTest> testReport = new ThreadLocal<ExtentTest>();

public void onTestStart(ITestResult result) {

ExtentTest test = extent.createTest(result.getTestClass().getName()+" @TestCase : "+result.getMethod().getMethodName());

testReport.set(test);

}

public void onTestSuccess(ITestResult result) {

String methodName=result.getMethod().getMethodName();

String logText="<b>"+"TEST CASE:- "+ methodName.toUpperCase()+ " PASSED"+"</b>";

Markup m=MarkupHelper.createLabel(logText, ExtentColor.GREEN);

testReport.get().pass(m);

}

public void onTestFailure(ITestResult result) {

String excepionMessage=Arrays.toString(result.getThrowable().getStackTrace()); testReport.get().fail("<details>" + "<summary>" + "<b>" + "<font color=" + "red>" + "Exception Occured:Click to see"

+ "</font>" + "</b >" + "</summary>" +excepionMessage.replaceAll(",", "<br>")+"</details>"+" \n");

/\* try {

ExtentManager.captureScreenshot();

testReport.get().fail("<b>" + "<font color=" + "red>" + "Screenshot of failure" + "</font>" + "</b>", MediaEntityBuilder.createScreenCaptureFromPath(ExtentManager.screenshotName)

.build());

} catch (IOException e) {

}\*/

String failureLogg="TEST CASE FAILED";

Markup m = MarkupHelper.createLabel(failureLogg, ExtentColor.RED);

testReport.get().log(Status.FAIL, m);

}

public void onTestSkipped(ITestResult result) {

String methodName=result.getMethod().getMethodName();

String logText="<b>"+"Test Case:- "+ methodName+ " Skipped"+"</b>"; Markup m=MarkupHelper.createLabel(logText, ExtentColor.YELLOW); testReport.get().skip(m);

}

public void onTestFailedButWithinSuccessPercentage(ITestResult result) {

// TODO Auto-generated method stub

}

public void onStart(ITestContext context) {

}

public void onFinish(ITestContext context) {

if (extent != null) {

extent.flush();

}

}

}

* Create a new test case 2.

package testcases;

import org.testng.Assert;

import org.testng.SkipException;

import org.testng.annotations.Test;

public class TestCase2 {

@Test

public void doLogin() {

System.out.println("Executing Login Test");

}

@Test

public void doUserReg() {

Assert.fail("User Reg Test Failed");

}

@Test

public void isSkip() {

throw new SkipException("Skipping the test case");

}

}

* Create Testng XML:

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">

<suite name=*"Suite"*>

<listeners>

<listener class-name=*"extentlisteners.ExtentListeners"*/>

</listeners>

<test thread-count=*"5"* name=*"Test"*>

<classes>

<class name=*"testcases.TestCase2"*/>

</classes>

</test> <!-- Test -->

</suite> <!-- Suite -->