I have used test NG frame work

I used extent report for reporting

I have used Page object model

For log purpose i have used log 4j

I have created common utils class , in that I have created various methods for re use

Purpose

Ex: type on element method etc

T

All the screen shots have been saved in screen shot folder

All the code uploaded in big bucket I have shared the link . you can download it and execute the code.

Code Explanation:

Task 1 - API:

 Public API - https://dog.ceo/dog-api/

1. Perform an API request to produce a list of all dog breeds.

Code:

Excel\_CIB\_value=ExcelUtils.readExcelDataFileToArray("src/test/resources/CIB\_Assessment.xlsx","API\_Details");  
CommonUtil.initiateExtentReport("Assessment",CIB\_Assessment\_1.class);  
ExtentReport.addTest("CIB\_Assessment1");  
RestAssured.baseURI = Excel\_CIB\_value[1][0];  
RequestSpecification httpRequest = RestAssured.given();  
Response response = httpRequest.request(Method.GET, "/all");  
String responseBody = response.getBody().asString();  
ExtentReport.reportEvent(TestStatus.PASS,"List of All Dog Breeds: "+"<br/>"+"<br/>"+responseBody);

Using code, verify “retriever” breed is within the list

Code:

Assert.assertTrue(responseBody.contains("retriever"));  
ExtentReport.reportEvent(TestStatus.PASS,"Retriever Breed is within the list");

3.Perform an API request to produce a list of sub-breeds for “retriever”

Code:

RestAssured.baseURI = Excel\_CIB\_value[1][1];  
RequestSpecification httpRequest2 = RestAssured.given();  
Response response2 = httpRequest2.request(Method.GET, "/list");  
String responseBody2 = response2.getBody().asString();  
ExtentReport.reportEvent(TestStatus.PASS,"List of Retriever Breed List: "+"<br/>"+"<br/>"+responseBody2);

4.Perform an API request to produce a random image / link for the sub-breed “golden”

RestAssured.baseURI = Excel\_CIB\_value[1][2];  
RequestSpecification httpRequest3 = RestAssured.given();  
Response response3 = httpRequest3.request(Method.GET, "/random");  
String responseBody3 = response3.getBody().asString();  
ExtentReport.reportEvent(TestStatus.PASS,"Image of Golden Sub Breed "+"<br/>"+"<br/>"+res

Task 2 - Web:

1.Navigate to - http://www.way2automation.com/angularjs-protractor/webtables/

Excel\_CIB\_value=ExcelUtils.readExcelDataFileToArray("src/test/resources/CIB\_Assessment.xlsx","Login");  
driver.get(Excel\_CIB\_value[1][0]);

2.Validate that you are on the User List Table

@Test  
public void CIB\_Assessment2() throws IOException  
{  
 CommonUtil CommonUtil=new CommonUtil(driver);  
 CommonUtil.initiateExtentReport("Assessment",CIB\_Assessment\_2.class);  
 Excel\_CIB\_UserDetails=ExcelUtils.readExcelDataFileToArray("src/test/resources/CIB\_Assessment.xlsx","UserDetails");  
 ExtentReport.addTest("CIB\_Assessment2");  
  
 //Fetching Webtable Row Count  
 List<WebElement> rows = driver.findElements(By.xpath("//table[@class='smart-table table table-striped']/tbody/tr/td[1]"));  
 for (WebElement element : rows)  
 {  
 String name = element.getText();  
 if (name.equals("Surendra"))  
 {  
 p=1;  
 }  
 }  
 if (p==1)  
 {  
 ExtentReport.reportEventWithScreenshot(TestStatus.FAIL,"My Name is present in User List Table",CommonUtil.captureScreenshot("Username Validation"));  
 }  
 else  
 {  
 ExtentReport.reportEventWithScreenshot(TestStatus.PASS,"My Name is not present in User List Table",CommonUtil.captureScreenshot("Username Validation"));  
 }

Click Add user and

Add users with the following details:

o

for (int i=1;i<=2;i++)  
{  
 CommonUtil.clickOnElement(Protractor.Add\_User);  
 CommonUtil.typeOnElement(Add\_User.First\_Name, Excel\_CIB\_UserDetails[i][0]);  
 CommonUtil.typeOnElement(Add\_User.Last\_Name, Excel\_CIB\_UserDetails[i][1]);  
 CommonUtil.typeOnElement(Add\_User.UserName, Excel\_CIB\_UserDetails[i][2]);  
 CommonUtil.typeOnElement(Add\_User.Password, Excel\_CIB\_UserDetails[i][3]);  
 if(i==1)  
 {  
 CommonUtil.clickOnElement(Add\_User.Company\_AAA);  
 }  
 else  
 {  
 CommonUtil.clickOnElement(Add\_User.Company\_BBB);  
 }  
 CommonUtil.selectFromList(Add\_User.Role, Excel\_CIB\_UserDetails[i][4]);  
 CommonUtil.typeOnElement(Add\_User.Email, Excel\_CIB\_UserDetails[i][5]);  
 CommonUtil.typeOnElement(Add\_User.Mobilephone, Excel\_CIB\_UserDetails[i][6]);  
 ExtentReport.reportEventWithScreenshot(TestStatus.PASS,"User "+(i)+" Details",CommonUtil.captureScreenshot("Add\_User"));  
 CommonUtil.clickOnElement(Add\_User.Save);

Ensure that User Name (\*) is unique on each run

o Ensure that your users are added to the list

/Validating User 2 Details with the values present in Excel sheet  
 List<WebElement> User2 = driver.findElements(By.xpath("//table[@class='smart-table table table-striped']/tbody/tr[2]/td"));  
 if(User2.get(0).getText().equals(Excel\_CIB\_UserDetails[1][0]) && User2.get(1).getText().equals(Excel\_CIB\_UserDetails[1][1]) && User2.get(2).getText().equals(Excel\_CIB\_UserDetails[1][2]) && User2.get(5).getText().equals(Excel\_CIB\_UserDetails[1][4]) && User2.get(6).getText().equals(Excel\_CIB\_UserDetails[1][5]) && User2.get(7).getText().equals(Excel\_CIB\_UserDetails[1][6]))  
 {  
 ExtentReport.reportEventWithScreenshot(TestStatus.PASS,"User 2 Details are inserted correctly in the Webtable",CommonUtil.captureScreenshot("User1"));  
 }  
 else  
 {  
 ExtentReport.reportEventWithScreenshot(TestStatus.FAIL,"User 2 Details are incorrect",CommonUtil.captureScreenshot("User1"));  
 }  
  
 //Validating whether UserName is unique on each run  
 List<WebElement> UserName\_List = driver.findElements(By.xpath("//table[@class='smart-table table table-striped']/tbody/tr/td[3]"));  
 ArrayList<String> UserName\_String = new ArrayList<String>();  
 for (WebElement column : UserName\_List)  
 {  
 //converting webelements to String  
 UserName\_String.add(column.getText().toString());  
 }  
 if(UserName\_String.size()==UserName\_String.stream().distinct().count())  
 {  
 ExtentReport.reportEventWithScreenshot(TestStatus.PASS,"Values in User name column is unique",CommonUtil.captureScreenshot("Unique"));  
 }  
 else  
 {  
 ExtentReport.reportEventWithScreenshot(TestStatus.FAIL,"Values in User name column is not unique",CommonUtil.captureScreenshot("Not Unique"));  
 }  
 }  
}