**EXPERIENCE RELATED KNOWLEDGE ON PROJECT**

**Q1. Explain your project.**

Make a document containing the following.

You should be able to speak on your project for at least 15 mins based on this document.

1.Give a unique project name- example Caballo, it should not come up in google search meaning no other project of same name should be there.

2.Use a Client- A small company having no mention of domain and place(country), choose one in small country having tech equivalent to India like Nigeria, should have less star rating. In interview just mention client name and not location and domain.

3.Give synonyms to module names and sub modules and elements

4.List at least 15 defects that you faced

**Q2. If they ask why can't we see your tool/application/project on google?**

It is because the product is for limited end users. It is not very famous and is new so it might not be visible in the first few pages of google search.

**Q3. What are the roles and responsibilities in your project?**

1.Manual activity-

Whenever I got the test cases from manual team, the team lead used to allocate the test cases via JIRA.

Once test cases were allocated, I executed the test cases manually to understand the functionality of the product.

If the test cases were not clear I talk to the author to get the clarity.

Next, I checked whether the test cases are automatable or not.

2. Test script development activity-

Before the script development, I had pulled the latest framework from the git.

I created test data required for my test(optional) and generic library (having many generic methods) was required which are repeatedly needed I would create those methods.

I would add the required business libraries in the POM Class. \*pom class methods are also called business logic\*

I have created POM classes and added elements when it was required.

I have developed automation test script using framework component.

3.Review Activity-

Whenever test script development completed, I sent my scripts for review purpose.

My script was reviewed either by my colleagues or my seniors(never say lead or junior)

Whenever test script was allocated to me for review then I went and checked for java and automation coding standards.

After the review, I pushed the code into the GitHub.

4.Test Execution Activity-

Whenever we got a new build in the testing environment, Jenkins was configured by our team lead to get the smoke and regression suite execution result via mail.

Whenever we got execution report from Jenkins I went through the report and saw which test cases passed and which ones failed.

When test scripts failed, I ran them in debug mode to find the root cause of the failure.

If the test script had failed because of product issue, I would log the defect in JIRA.

If the test script failed because of program issue or script issue, I would update the script and push it back to GitHub.

5.Git Activity-

I was involved in handling git conflict.

I was involved in executing git commands like push, pull, merge, commit, etc.

I was involved in maintenance of POM Classes and test scripts in git repository.

I was involved in creating pull request.

6.Maven activity-

I was involved in maintaining dependency in pom.xml.

I have a good understanding of maven lifecycle(comprises of 4 commands mvn clean, mvn validate , mvn compile, mvn test).

I was involved in creating maven project.

7.Jenkins Activity

Good knowledge on Jenkins plugins configuration (git integration, maven integration, html publisher, build pipeline).

Good knowledge on Jenkins execution modes like on demand, on schedule and poll scm (source code management).

Good knowledge in creating pipelines and CI/CD process.

8.Agile Activity

Involved in manual test case execution in sprint 1.

Involved in automation test script development from sprint 3.

Involved in daily stand-up meetings, retrospect meeting and sprint planning meeting.

9.Framework Development Activity-

I was a part of framework development

I was involved in configuration of the framework by integrating tools like Maven and Jekins.

I have configured Listeners feature to get the screenshot.

I have contributed to genericUtility package by creating reusable/generic methods

I was involved in test script development estimation. **\*add only if you are applying for position of lead\***

I was involved in manual test case allocation. **\*add only if you are applying for position of lead\***

**Q4. Explain your daily activity?**

My daily activity depends on the task I was allocated either through mail, or in the daily stand-up meeting.

Whenever I work from office, the first thing we do is check our mails. If the mail is with respect to script development, I will perform the script development activity.

If the mail is with respect to review, then I go for review activity.

If the mail is with respect to bug fixes, I run the test scripts individually and close the defects.

If the mail is with respect agile meetings, I get involved in the meetings.

If the mail is from Jenkins, I go through the result and get involved in test script execution activity.

**Q5. What are the challenges you have faced in your project?**

Initially understanding the framework was challenging.

Initially setting of the automation environment was a big challenge because in my project I we were using a lot of open-source tools to design the framework and the tools were having compatibility issues (solution- change versions, google the error and troubleshoot).

If manual test cases are not clear the automation is challenging (solution- talk to the author, write a mail to the manual lead and ask for clarification).

In my previous project I was allocated to automate end to end scenarios but during script execution, I found synchronization issues which was challenging (Solution- we created generic method to put implicit, explicit and custom wait to my test script. When the scripts were failing regardless of implicit and explicit waits, for those scenarios I have used RetryAnaylser in my framework.

The configuration of Maven, Git, Jenkins along with the framework was also challenging.

**Q6. What exactly do you review in automation scripts?**

-->Java Coding Standards

1.Class name should start with uppercase letters and class name should be module name or scenario name.

2.Variable name should start with lowercase letters and should be camelCase.

3.Package name should start with lowercase letters and should be module name.

4.Methods should have description (Javadoc with parameters, return type, etc)

5.Every class should have author.

6.Logic of the code should be optimised.

-->Automation Coding Standards

1.Data should not be hard coded.

2.Locators should not be hard coded.

3.Xpath should be relative.

4.Every expected result should be verified using Assert statement.

5.Automation coverage should be good.

6.Review reusability factor of the code.

7.Every navigational step should have comments.

8.Every navigational step should have reports.

**Q7.What are the tools used in your project?**

jdk 1.8

selenium webdriver

browser

driver executeble

apache poi

testng

jdbc api

maven

git

jenkins

**Q7. If you have found a critical bug but your manager says make it minor and release it because we don’t have the time to fix it, what should be your approach?**

1.We should follow manager's instructions because we cannot deviate from the hierarchy.

2.We have to list out all the problems that might occur if this bug is in the product.

3.We will discuss the impact of the bug with the manager.

4.Provide him suggestions like suggesting that we add it to the change log/release note.

5.Discuss the same in the sprint review meeting.

**Q8. If you are given 100 test cases to automate what will be your approach?**

1.I will analyse means go through the test cases and understand the functionality of the product(System study).

2.I will then understand the priority and the complexity.

3.I will estimate the time and create a plan.

For example 100 test cases will have 3 levels

complex - do 1 testcase per day

medium - do 2 test cases per day

simple - do 4 test cases per day

Total you will be able to do 4 testcases in a day 1 complex, 2 medium and 1 simple for example.

4.Write test script as per the plan.

5.Review

6.Delivery

**Q9. Suppose the story point that you have decided before the starting of the sprint is not enough, what will be your approach?**

I did not face such kind of issues in my previous project because I plan properly before execution.

If I encounter such issues, I will list out all the issues for which I could not deliver the tasks and same I will discuss in retrospect meeting with the team lead and try to fix the issues in the next sprint.

**Q10.List out the exceptions which occurred both java and selenium exceptions you faced in your project? WRITE ATLEAST 10 EACH!**

**Q11.Product is live and a customer found a bug and has reported to the company, what will be your approach?**

For every bug leakage in live you will have 24hrs deadline. Within that 24hrs we have to fix the bug and provide the patch build.

1.Stop the current sprint task immediately

2.Allocated development and test engineers will get inside the war room

3.development engineer should fix the bug and the test engineer should test the bug and provide the patch build.

**Q12.Product is going to production environment but customer is asking to add a new feature, what will you do?**

1.We should not follow the customer's instruction blindly.

2.List out all the problems which you are going to encounter if we add the new feature

3.We will provide suggestions like

it is better not to add the feature because we don't have enough time to test the feature

we can execute only smoke scenarios but we cannot expect 100% bug free product

we can add it but have to make sure that the same is written in change log/release note

**Q13.Whenever deployment happens how will you ensure that the proper changes are deployed?**

1.Check the build version

2.Check the change logs which come along with every new build

3.Get the latest sprint test case from JIRA and execute them.

**Q14.Explain your framework.**

In my project we have used TDD(Test Driven Development as used TestNg). My framework is built using Maven project.

My framework is hybrid framework because it is a combination of three different types of frameworks

It is Data Driven Framework, as in my framework we have used datas from external resource such as property file and excel sheets

In my framework we have created generic(reuseable) methods which are used again and again in my test scripts.That is why my framework is also Method Driven Framework.

In my framework all the test scripts i have segregated module-wise that is why my framework is also a Modular Driven Framework.

In my framework I have several components such as genericUtility.

In genric Utility I have created generic classes such as base class, excelUtility, fileUtility, javaUtility, etc. WRITE ALL AND EXPLAIN EVERYTHING.

The second component is POM Repository.

In it, I have created POM Classes for each occuring page in my product and in each class I have identified the required elements present in that page using

@FindyBy, @FindBys and @FindAll and also i have added business logics for repeated tasks in that page

The third component are test scripts.

In my framework i have segregated all the test scripts using its module names. to develop test scripts i have used TestNg annotation callled @Test and assertions to verify expected result.

The fourth component is test data. I fetch test data from excelsheets and property file using generic methods created in excelUtility and fileUtility respectively.

Fifth component is screenshot. EXPLAIN WHY AND HOW

Sixth component is resources which contains all the driver executables but if we use webdriver manager we dont need driver executables.

Seventh component is the report. The report will be present in the test output folder as index.html or emailableReport.html

Eight component is pom.xml. It is the driving unit of my framework. Here we maintain all the dependencies required in my framework. Maven tool reads pom.xml file.

Ninth component is Maven. EXPLAIN ALL.

Tenth component is Jenkins. EXPLAIN ALL.