**AUTOMATION LEAD INTERVIEW QUESTIONS- PROD AND SERV BASED COMPANIES**

1. **Explain about your career experience in brief:** 12-Automation, 3-Manual . Tools and languages used in Automation testing: Cypress, Python:Pytest, Selenium with Java, Python. Automation frameworks: Cypress(Mocha), Python: Pytest, Selenium: Data driven, Keyword driver , Cucumber BDD, Hybrid framework

Programming languages: Java, Python

1. **Explain about your roles and responsibilities as an Automation Lead**.-> 30%-Automation lead role, 70%- Individual contributor

Activities:

1. Participate in different meetings.
2. TestScenarios, Testcases, Automation scripts(code, locators, framework enhancement) creation and reviewing with stakeholders for signoff.
3. Code reviews- adhere to code practices, all unit testcases, all testcases should pass- code hygiene.
4. Test Metrics- Manual and Automation test metrics- %Execution, %Pass,defects count, ROI, Not a bug, accepted defects%
5. Grooming team and resolving their doubts in a timely manner and ensuring good environment within the team.- work delegation in a proper manner.
6. Overall ensuring deliverables are moving with correct pace and there are no risks.
7. If any risks spotted, call it out to scrum master, and raise in different forums.
8. Getting support from dev/cross teams for any issues which is impacting the teams.
9. **Explain about the framework you had worked on and its components.**
10. Write code using Cucumber BDD , to perform login on a website and validate the Gmail logo and user profile icon displayed in the home page once signed in.- Gmail website.

**Cucumber BDD: Mavenized project: pom.xml**

**Step Definitions, Test Runner, Features files: that has different scenarios.**

**Test Runner:**

**@RunWith(Cucumber.class)**

**@CucumberOptions(glue=”stepDefinitions”,features=”Features”)**

**public class TestRunner {**

**}**

**Background**: User loads the Gmail website and does login

Given user loads Chrome browser

And user enters application url “<https://www.gmail.com>”

When user enters “username” in username field

And user enters “password” in password field

And user clicks on the login button

Features file:

**Feature**: Gmail login

**Scenario**: User should be able to login successfully in the Gmail account

Then user should be able to see Gmail logo in Gmail home page

And user should be able to see their profile icon on right hand side

**StepDefinitions(glue to our Feature file) File:**

**public class StepDefinitions {**

**WebDriver driver;**

**@Given(“^**user loads Chrome browser**$”)**

**public void user\_loads\_Chrome\_browser() {**

**System.setProperty(“webdriver.chrome.driver”, System.getProperty(“user.dir”) + ”//resources//chromedriver.exe”);**

**driver = new ChromeDriver();**

**}**

**@Given(“^**user enters application url \”(.\*) \” **$”)**

**public void userEntersUrl(String applicationUrl)**

**{**

**driver.get(applicationUrl);**

**Syso(driver.getTitle());**

**}**

**@Given(“^**user enters \”(.\*) \” in username field **$”)**

**public void userEntersUsername(String username)**

**{**

**driver.findElement(By.class(“username”)).sendKeys(username);**

**}**

**@Given(“^**user enters \”(.\*) \” in password field **$”)**

**public void userEntersPassword(String password)**

**{**

**driver.findElement(By.class(“username”)).sendKeys(password);**

**}**

**@When(“^**user clicks on the login button$”)

**public void userClicksLoginButton()**

**{**

**driver.findElement(By.cssSelector(“button#login”)).click();**

**}**

**@Then(“^**user should be able to see Gmail logo in Gmail home page$”)

**public void userSeesGmailLogo()**

**{**

**try{**

**Assert.assertTrue(driver.findElement(By.id(“GmailLogo”)).isDisplayed());**

**} catch(Exception e)**

**{**

**Syso**(“Exception caught”,e.getMessage());

**}**

**finally {**

**//close DB connections, file objects, close driver sessions**

**}**

**}**

**@Then(“^**user should be able to see their profile icon on right hand side$”)

**public void userSeesProfileIcon()**

**{**

**Assert.assertTrue(driver.findElement(By.xpath(“//div[@id=’icon’]”)).isDisplayed());**

**}**

**Hooks File:**

@Before

public void beforeMethod(){

//Load properties file

//Load configurations

}

@After

public void afterMethod(){

//close connections/

//terminate browser

}

**Solution:**

BaseClass:

public class BaseClass {

WebDriver driver;

Properties prop;

public void getDriver() {

return this.driver;

}

public void initialize\_Properties(){

try{

prop = new Properties();

File fileObj= new File(System.getProperty("user.dir")+"//Config//config.properties");

FileInputStream fileinput = new FileInputStream(fileObj);

prop.load(fileinput);

}

catch(Exception e)

{

System.out.println("Exception caught");

}

}

public void initialize\_Driver(){

System.setProperty("webdriver.chrome.driver",System.getProperty("user.dir")+"//resources//chromedriver.exe");

driver=new ChromeDriver();

}

Utilities: Will have all utilities

public class Utilities {

}

Hooks file:

public class HooksOverall {

@Before

public void B4Scenario(){

System.out.println("This will run before each Scenario");

}

@After

public void AfterScenario(){

System.out.println("This will run after each Scenario");

}

}

Test Runner file

import org.junit.runner.RunWith;

import cucumber.api.CucumberOptions;

import cucumber.api.junit.Cucumber;

@RunWith(Cucumber.class)

@CucumberOptions(features="Features",glue="stepDefinitions",plugin = { "pretty", "html:target/reports/cucumber\_reports"})

public class Runner {

}

Background:

Feature file:

Feature: Gmail login

Background: User is Logged In to Gmail

Given user navigate to the login page of Gmail in Chrome browser

When user enters "username"

And user enters "password"

Then user clicks on the login button of the SignIn page

Scenario: Check for Gmail Logo and user's name once user has logged into Gmail

Then user should be logged in successfully into Gmail account

And user must see user's profile icon and Gmail logo present

Scenario Outline: Check for Gmail Logo and user's name once user has logged into Gmail

Given User loads "" url in the chrome browser

When user clicks on the SignIn link of Gmail page

When user enters "<username>" in the username field of login page

And user enters "<password>" in the password field of login page

And user clicks on the Login button of the SignIn page

Then user should be logged in successfully into Gmail account

And user must see user's profile icon and Gmail logo present

Examples:

|username|password|

|user1|pass1|

|user2|pass2|

background file:

import cucumber.api.java.en.Given;

import cucumber.api.java.en.Then;

import cucumber.api.java.en.When;

public class BackgroundSteps{

@Given("^user navigate to the login page of\_Gmail")

public void user\_navigate\_to\_the\_login\_page\_of\_Gmail()

{

}

@When("^user enters \"(.\*)\" username")

public void user\_enters\_username(String username)

{

}

@When("user enters \"(.\*)\" password")

public void user\_enters\_password(String password)

{

}

@Then("user should be logged in")

public void user\_should\_be\_logged\_in()

{

}

}

Step Definitions:

WebDriver driver

@Given("^User loads \"(.\*)\" url in the chrome browser$")

public void User\_loads\_url\_in\_the\_chrome\_browser(String applicationurl)

{

}

1. Solve Java coding questions: mostly asked on Strings and Arrays.
2. Find out occurrences of duplicate words in a string along with count.
3. UI Locator question: Write an xpath for identifying an element- as per question provided by interviewer.
4. Table cell. If any value- Samsung product if it exists inside the testcase.
5. Question using xpath axis: parent, child,ancestor,following-sibling,preceding-sibling,descendant
6. Question on writing cssSelector.
7. Git- Did you face a situation where there arised a Git merge conflict and how did you go about resolving this issue ?.
8. Which OOP’s concepts were used in Automation framework, explain with reference to your framework- Design framework and explain.
9. How was execution carried out from Jenkins?. Explain .
10. Rest Assured – Write code to hit a POST API call to an API, extract its response and validate if it contains our intended object.
11. Rest Assured- What is difference between POST and PUT. What happens if you do each of the call’s with same request body multiple times.
12. Jenkins: Did you create any Jenkins piplelines, if so , can you please explain it.
13. Docker basics: Have you worked with Docker, How and where it was used.
14. Which design patterns did you make use of in your Automation framework and why? . Explain .