Q) How did u help ur teammembers?

A) Knowledge sharing, Peer reviews, helped in improving their testscripts performance

Q) Did u have any clashes with ur teamlead or team member?

A) I remember an incident where we were deciding on which framework to use I suggested BDD approach (as it has lot of advantages) ,

But other team members were little hesitant to go for BDD as it was completely new to them.

Finally we had to go for TDD approach

(There will be other factors that effect the decision ,business decision )

Q) What challenges u faced during testing?

A) I had a situation where I had to write testscripts without having actual UI

Based on the wireframes provided I had to write testscripts

Q) What did u enjoy most during Testing?

A) Implementing framework BDD approach using Cucumber

Q) What did u hate about testing?

A) Documentation part (But anyway I have to do it, for future reference purpose)

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JMeter🡪 Performance Testing

----------------------------------------------

I haven’t got much opportunity to perform Performance testing, the only only experience I have is “used JMeter for testing Rest API’s by Adding ThreadCounts to the Testplan(passing Thread-Count(20) and Ramp-up time(5-10sec) and analyse the TestReports.)

Add Sampler(give Https BaseURL and Basepath.)

Add Config(HTTP Header Manager and HTTP Authorisation Manager)

Add Listeners(generate Reports)

SELENIUM LATEST STABLE VERSION—4.1.4

Heroku ?

Originally designed as a replacement for the NCSA HTTP Server, it has grown to be the most popular web server on the Internet; Heroku: Build, deliver, monitor and scale web apps and APIs with a trail blazing developer experience. Heroku is a cloud application platform – a new way of building and deploying web apps.

Contract Testing?

Contract testing is a way to make sure that services can communicate with each other and that the data shared between the services is consistent with a specified set of rules.

Visual studio – is an IDE

What is [SpecFlow](http://specflow.org/" \t "_blank)?

Cucumber is a testing tool that supports Behavior Driven Development (BDD) framework. It defines application behavior using simple English text, defined by a language called Gherkin.

[SpecFlow](http://specflow.org/" \t "_blank)is another tool that can be added on top of Selenium that helps separate out the specific tests from the code into a more human friendly format readable by anyone. It is the .NET version of [Cucumber](https://cucumber.io/" \t "_blank) and uses the [Gherkin](https://github.com/cucumber/cucumber/wiki/Gherkin" \t "_blank) language *(given/when/then)* to format tests.

Cucumber?

Behavior Driven Development gives us an opportunity to create test scripts from both the developer’s and the customer’s perspective as well.

1)What is DOM?

The Document Object Model (*DOM*) is the data representation of the objects that comprise the structure and content of a document on the web.

DOM in Selenium WebDriver is an essential component of web development using HTML5 and JavaScript. The full form of DOM is Document Object Model.

2)What is TestNG?

TestNG stands for Test Next Generation and it is an open-source [test automation framework](https://www.browserstack.com/guide/best-test-automation-frameworks) . Think of TestNG as an upgraded version of the other two frameworks. It provides additional functionalities such as test annotations, grouping, prioritization, parameterization, and sequencing techniques in the code – features that were not provided earlier.

TestNG is the framework created for executing unit tests in java program by the developers. TestNG is also used by the software testers to efficiently run the automated test scripts created in Selenium Webdriver. Its full form is the “Testing New Generation” framework.

TestNG offers the following features:

* It generates the report in a proper format that includes the number of test cases executed, the number of failed test cases, and the test cases that have been skipped.
* Multiple test cases can be grouped easily by converting them into TestNG.xml file. Here, set the priorities to execute test cases.
* Using TestNG, one can execute multiple test cases on multiple browsers, i.e., [cross browser testing](https://www.browserstack.com/live).
* The testing framework can be easily integrated with tools like Maven, Jenkins, etc.

Writing a test is typically a three-step process:

* Write the business logic of your test and insert [TestNG annotations](https://testng.org/doc/documentation-main.html#annotations) in your code.
* Add the information about your test (e.g. the class name, the groups you wish to run, etc...) in a [testng.xml](https://testng.org/doc/documentation-main.html#testng-xml) file or in build.xml.
* [Run TestNG](https://testng.org/doc/ant.html).

3)Diff B/W TestNG and JUnit?

Both are Test Automation Frameworks.TestNG is like advanced version of JUnit where additional functionalities(annotations) are added.

Jobs performed in Previous Experience in SmartCore?

Manual Testing Qns and Agile Methodology

-------------------------------------------------------------

Q)Testing process u followed in ur cpny?

Followed agile.team lead assigns userstories,our team go through and understand userstories and then write testscenarios, testcases.did self,peer and lead reviews and execute the testcases ,once the build is released.find defects->update jira->once dev fixes bug->re-run the testa/do regression test bases on the defect->if bug is fixed then closes the defect in jira->if bug not fixed reopen the issue->moves to the sprintbacklog

Q)why do u test s/w?

to create stable functional s/w and Goal is to release quality product to d customer

Q)How do u write testcases?

In excelsheets

Testscenarios, test cases

Q)Prerequisite for writing testcases?/how do u know functionality of appln for writing appln?

User-Stories, also sometimes dev provide white/model screenshots

Also need Test data.

Q)how do u know your testcases covered the functionality of the appln?how do u track ?

Using tracebility matrix(map b/w testscenarios & testcases)

RCN(Requirement clarification note)

Q)Before starting testcase execution,what activities do u do?

After writing testcases,get reviwed,Get signoff from the lead,then start execution

Q)while execution u found a bug,what will u do?

Double check the functionality by executing testcase multiple times(environmental ,browser compatability issue), consolidate all the steps,log files,screenshots,collect all these, then report /create a defect in jira assign the defect to the developer.

Q)priority? Severity?

Priority:(time)how soon we should close the bug

Severity:(functionality) impact of the functionality ,how much important the feature is to the customer

ex: scenario :the company logo is wrong?

Comes under : High priority, low severity

Ex: appln crashing in some page very rare cases(not everytime) not affecting other functionality(no dependency)?

Comes under: low priority (as u can fix it later also),high severity

Q)Workflow in jira?

Once I get assigned a userstory it moves to the to-do list, then when I start working Ill change to ‘in-progress’,Once I finished working on my storypoint, I’ll attach the test results/share the result documentation for review, then it ll get moved to ‘done’.

Q)How did u log defects in jira?

Create a defect on jira by, Create Tab on menu🡪Select

ProjectName: lms🡪

IssueType:Epic,defect,Userstory🡪

Priority:Low,Medium,High,Critical🡪

Summary:

Description:

Sprint:

Storypoints:

Assignee:

All the Current sprint tasks will be visible in kanbanboard.

Q)Where do u store all d testdocuments?

Sharepoint, or common n/w drive location

Q)Defect Resolution?Report a defect then what feedback u get from dev?

A)accept ( fix it in upcoming release )or reject(not a bug,enhancement ,dublicate bug)

Q) Diff b/w Epic story and task

Epic: Huge Requirement-Collection of userstories (requirements)

Story: Requirement/functionality of appln🡪Feature

Task: activity/action:

once u get ownership of userstory:Analyse and understand the userstory->

Write testcases,review,execution,automate

Who creates these tasks?->tester,developer during sprint planning meeting

Q)Sprint Review meeting?

After completion of sprint,have a review,what sprint backlogs r there previous sprint,what backlogs can we move to the next sprint,how many scenarios are finished

Q)Storypoint?

Estimation of the sprint/userstory-time taken to finish userstory

Q)Scrum Board?

We can track list of stories(planned, todo list,in progress,developed,tested,completed)

Q)diff types of locators?

Q)Diff b/w Link text, partial linktext

Q)diff types of xpath?

Q)Which xpath u prefer?

Relative xpath

If developer changes or add any elements the absolute xpath breaks/fails

Q)there is button whos id:start before clickwhich changes dynamically to id:stop after click

Contains

//input[id=’start’ or id=’stop’]

Q)Waits()

Q)how to capture text from webpage?

Use gettext()

Q)get some attribute value from a button?

Element.getattribute.name/id

Q)how to check logo is displayed or not?

Capture element then .isDisplayed()

Q)how do u handle dropdown?

Using Select class,

get options using diff methods

element.getOptions()

e.selectbyValue()

e.selectbyIndex()

e.selectbyVisibleText()

Q)Assertions ?

For doing validations,compare actual with expected

Types?

Hard Assertions: if assertion fails, next execution stops

Soft Assertions: doesnot throw exception,continuous execution

Q)Diff b/w driver.close() ->close current browser

driver.quit()-> close all browsers

Q)Framework

reusable components in ur framework?

A) used reusable componemts (baseclass) using inheritance

Maintainability

Q)challenges?

4)Test Scenarios for to make a zoom call?

JAVA Questions

Q) What is Class?

A) It’s a user-defined blueprint from where objects are created. It represents set of properties/attributes and methods of the object.

Q)what is a constructor?

1)Can constructor be static?

No,because static members r initialized before object creation.

2)diff final keyword, finally?

final variable: can’t change its value

final method: can’t override ,but can overload

final Class: can’t be inherited

finally : used along try and catch, the block of code in finally will be excecuted regardless of exception thrown or caught.

We have “file.close()” or “dbconn.close()”

2)Constructors can be overloaded but not overriden

3)diff b/w abstract classes interfaces?

Abstract Classes:

Have both comcreate and abstract methods

Cannot create object /instantiate them.

Class extends abstract classes

Interfaces:

Have only abstract methods

By default variables and methos are public ,static and final

Cannot instantiate /create object

Classes implements interface

Java achives multiple inheritance through interfaces

2)why String is immutable?

String is not primitive datatype,its an object.

Immutable means the memory locations remains same if there is new String is assigned with the same value value,but references are different.

str1=”uma”

str2=”uma”

Both the references will be pointed to same object location.

Strings are stored->String Pool

StringBuffer and StringBuilder are mutable SBuilder faster than other

3) Diff b/w throws and throw ?

A) throw: is used inside method body.used to explicitly thow a single exception for specific condition inside block of code.

Ex:

Public void method(){

try{

int i=10/0;

throw new ArithmeticException()

}

catch(ArithmeticException e){

e.printStackTrace();

}

}

Throws: is defined in signature to tell this method may throws an exception.

Q)compare two strings?

String str1=”uma”;

String str2=”devi”;

Sysout(str1.equals(str2))

Q)Reverse the String?

String str=”umadevi”;

String str2=””;

If(int i=0;i<str.length();i++)

{

str2=str.charAt[0]+str2;

}

sysout(str2);

Q)overload?Can we overload main()?

Same method name with diff parameters.

Main() can be overloaded but not override

Q)override?

Performed while Inheritance (parent,child)

Same methodname, the implementation is different

Q)final?

Varible:We can’t change the value of the variable.

Method:can’t override that method

Class:can’t inherit the class

Q)Diff b/w static and Final?

A) Static: It belongs to Class.We don’t need to create object to access static variables.Can be accessed directly within the class,from outside theclass use classname to access them.

can be used on variables,methods,classes.

Static methods can’t be overridden.can be overloaded

Static class can’t be inherited.

https://www.geeksforgeeks.org/static-keyword-java/

Final: can be used on variables,methods,classes

Final variables r constant

Final methods can’t be overridden, but can be overloaded

Final classes cant be inherited

Q) Diff b/w static and dynamic polymorphism?

static polymorphism happens during compile time . Overloading , methods in same class

Dynmaic polymorphism happens during runtime. overriding happens runtime,(in diff classes)

Q)Diff b/w this and super keywords?

Both r used for constructor calling.

this :refers to the current class

super: refers to the parent class

Q) What are constructors?

Constructors r called whenever a object is created. Constructor looks like a method but with no return type and named as class name.

By default it is empty.

If u want to initialize variables during object creation we use constructors.

It can be overloaded, but not overridden.

Q)Encpsulation?

Provides security and easy maintainability,flexibility🡪any changes in one part of code class won’t affect other classes

Encapsulation is a way of hiding the implementation details of a class from outside access and only exposing public interface that can be used to interact with the class.

\* This is achieved by creating private variables and accessing those variables by public setters and getters.

POJO classes

Q)Abstraction?

Hide the implementation show only the necessary functionality.

Declare abstract methods, to make the implementation mandatory in all child classes.

Abstract class Vehicle

{

abstract void color();

}

class Car extends Vehicle

{

public void color()

{

sysout(“car color is red”);

}

Q)Access specifier?

Public private protected

Q)Collections?

Used to store primitive values, objects in a single entity

List->insertion order is preserved,can extract using get(index)

Map->insertion order not preserved,no get() available to extract

3) What do you mean by a Maven Repository?

Answer:

Maven repository is the location of a directory where all the related project artifacts, jars, libraries, plugins are kept and can be utilized by Maven easily.

4) POM in Maven?

A) It is an xml file which has project details, configurations details(like plugins,dependencys) used by maven to build project

5) Lifecycle of Maven?

1. A) **Validate:** This step validates if the project structure is correct. For example – It checks if all the dependencies have been downloaded and are available in the local repository.
2. **Compile:** It compiles the source code, converts the .java files to .class and stores the classes in target/classes folder.
3. **Test:** It runs unit tests for the project.
4. **Package:** This step packages the compiled code in distributable format like JAR or WAR.
5. **Integration test:** It runs the integration tests for the project.
6. **Verify:** This step runs checks to verify that the project is valid and meets the quality standards.
7. **Install:** This step installs the packaged code to the local Maven repository.
8. **Deploy:** It copies the packaged code to the remote repository for sharing it with other developers.

6) Maven Commands?

* **mvn clean:** Cleans the project and removes all files generated by the previous build.
* **mvn compile:** Compiles source code of the project.
* **mvn test-compile:** Compiles the test source code.
* **mvn test:** Runs tests for the project.
* **mvn package:** Creates JAR or WAR file for the project to convert it into a distributable format.
* **mvn install:** Deploys the packaged JAR/ WAR file to the local repository.
* **mvn deploy:** Copies the packaged JAR/ WAR file to the remote repository after compiling, running tests and building the project.

Collection Framework Qns

1.What is a collection?

Using collections we can store multiple objects as a single entity.It can have objects of diff datatypes

Perform operations: searching,sorting,insert,manipulate,delete

elements/objects

2.List,Queue,Set,Map(interfaces) extends Collection,Iterable(root) Interfaces

2.List: allows duplicate values and follows insertion order,retrieve values using index

ArrayList(): Ideal to use if u have more scenaios where u retrieve , add objects.

LinkedList(): Ideal to use if u more have scenarios where u do inserting in the middle , delete objects

Diff b/w Arraylist, LinkedList:

ArrayList stores elements in an array format.

Linkedlist stores elements as Nodes.Each node has LEFTsidenode(referes to previous element),Rightsidenode(represents nxt element),Center node(has value)

For inserting and accessing ArrayList works better

Manipulating data is faster in LinkedList,slow in Arraylist

Syntax remains same for LinkedList() also…

List li=new ArrayList();

insertion: li.add(“apple”);

insert at (middle)part index: li.add(index,value)

retrieve: li.get(0);

can traverse throughlist: Iterator it=li.iterator();

deleting single element: li.remove(index);

delete all elements: li.clear()

3.Set: allows unique values and doesnot follow insertion order

Q)Generics: define the type of the collection.helps with typecasting overhead.

Ex: List<String> li=new ArrayList<String>();

Only allows String types.

JAVA Coding Example Qns:

Q) Reverse a String?

Q)Reverse a Number?

Q)arr[5] elements ,get sum of elements in array?

Q)Swap numbers?

Q) Disply if number is even and odd number?

Q)Take an array of numbers {1,2,5,4,6,8,7,0} display sorted order of firsteven and odd {0,2,4,6,8,5,7}

SELENIUM questions

1. What is test automation or automation testing?

Automation testing is a software testing strategy in which a tester programmatically runs the tests using a tool or a framework instead of manually going through the test cases and executing them one by one.

2.  What are the advantages of automation testing?

Automation testing helps teams and organizations automate the testing efforts, in turn reducing the need for human intervention and thus achieving greater speed, reliability, and efficiency. It also helps speed up the development cycle, as the developers get quick feedback and can iterate quickly.

3. Name some of the commonly used Automation Testing tools that are used for Functional Automation.

1. **Selenium  
        2. QTP or UFT(**Unified Functional Testing Form HP)---🡪 designed to automate Functional tests. Supports only Windows O.S and multiple browsers

        3.Katalon Studio  
        4. Test Complete Tool  
        5. Watir tool

4. define different types of testing when and where they are used

**Unit tests**: These are written by software developers and test a unit of code in isolation.

1. B.  **Integration tests**: These test how well different software components work with each other.
2. C.  **Regression tests**: Verify that the new code didn't break any existing functionality.
3. D.  **Performance tests**: Ensure that the software won't crash and perform reasonably under heavy load or stringent conditions.
4. E.  **UI tests**: Ensure that the software uses a consistent user experience and no visual or graphical elements on the screen are broken.

5. Name some of the commonly used Automation Testing tools that are used for Non-Functional Automation.

1. JMeter  
             Loadster  
             Loadrunner  
             Loadstor  
             Neoload  
              Forecast  
              Load Complete

6. What is Selenium?

Selenium is a portable framework for software testing. Selenium tool facilitates with a playback tool for authoring functional tests without the need to learn a test scripting language.

7. What are the different components of Selenium?

Selenium Integrated Development Environment (IDE)- has record and playback option

Selenium Remote Control (Now Deprecated)

WebDriver- automates browser actions

Selenium Grid- proxy server used to run parallel tests on multiple machines

8. List out the names of programming languages, browsers and operating systems that are supported by Selenium.

**Programming Languages**: C#, Java, Python, PHP, Ruby, Perl, JavaScript.  
        **◦** **Browsers**: Google Chrome, Mozilla Firefox, Internet Explorer, Edge, Opera, Safari, etc.  
        **◦       Operating Systems**: Android, iOS, Windows, Linux, Mac, Solaris.

9. What are the significant changes/upgrades in various Selenium versions?

**Selenium v1.0:**

* Version 1.0 was the initial release of Selenium.
* It included three tools: Selenium IDE, Selenium RC, and Selenium Grid

**Selenium v2.0:**

* Selenium WebDriver was introduced replacing Selenium RC in version "2.0".
* With the onset of WebDriver, RC got deprecated and moved to the legacy package

**Selenium v3:**

* The latest release Selenium 3 has new added features and functionalities.
* It includes Selenium IDE, Selenium WebDriver, and Selenium Grid.

1. 10. List some of the test types that are supported by Selenium

Functional Testing

* Regression Testing
* Sanity Testing Smoke Testing
* Responsive Testing
* Cross Browser Testing
* UI testing (black box)
* Integration Testing

1. How will you find an element using Selenium?

We use locators to find an element using Selenium.We use the method   
“FindElement()” or “FindElements()” and pass the weblocators as   
parameter.Weblocators can be ID,Name,Tag, Xpath,CSSlocator

Locate webelements by: id,ClassName,Name,linktext,xpath,CSSselector

2. write syntax for each one of the methods described in question no 1?

By id: driver.findElement(By.id(“abc”));

By classname: driver.findElement(By.className(“abc”));

By linktext: driver.findElement(By.linkText(“ click here”));

By partiallinktext: driver.findElement(By.partialLinkText(“here”));

By xpath: driver.findElement(By.xpath(“//tag[@attribute=’aaa’]”));

Bt css selector:

WebElement firstName = driver.findElement(By.cssSelector("input[id='first\_name']"));

3. List out the test types that are supported by Selenium?

Functional Testing  
RegressionTesting

4. what is assertion and types of assertion ?

Assertion is where expected value is validated again the actual received value.  
It returns the Boolean value.   
Type of Asserions are :Soft Assertion and Hard Assertion

//execute remain tests even assert cond fails

  SoftAssert softAssertion = new SoftAssert();

//To print assertion failure and the exception

           softAssertion.assertAll();

5. what is the use of X-path?

Xpath is useful in finding the dynamic Web Elements or the WebElements   
whose value changes everytime the webpage is loaded

6.  Explain the difference between single and double slash in X-path

/ starts finding the path from root node that is it starts from parent node. //   
starts the search in current node and uses attibutes to create the path.   
/ is used for absolute xpath and // is used for relative xpath

7. List out the technical challenges with Selenium

Waits, Internet Connection, browser versions etc

8. What is the difference between type keys and type commands?

Type keys is when we send keys from our code to enter values. Type   
command is also similar but it takes from webpage itself.Example: Selecting   
value from drop down.

9. What is the difference between verify and assert commands?

In the case of assertions, if the assert condition is not met, test case execution will be aborted. The remaining tests are skipped, and the test case is marked as failed.

In case of verify, tests will continue to run until the last test is executed even if assert conditions are not met.

10. What is JUnit Annotations and what are different types of annotations which are useful ?

Junit Annotations provides to determine what action need to perform by a class. It allows   
to organize and maintain test case.

Different Types of annotations : @BeforeClass , @AfterClass, @Test, @Before , @After @Ignores.  
Useful : @Before, @After @Test (most used)

11.Waits:

Implicit wait: applies to all web elements

Syntax: driver.setImplicitWaitTimeout(Duration.ofseconds(60));

Explicit wait: applies to particular element used for that takes time to load

Syntax:

Webelement ele=new WebDriverWait(Duration.ofseconds(10)).until(ExceptionCondition.elementtobeclick(xpath));

Flueint wait: simil to explicit but driver can poll for every particulqr time specified.

Wait<WebDriver> wait = **new** FluentWait<WebDriver>(*driver*)

.withTimeout(Duration.*ofSeconds*(30))

.pollingEvery(Duration.*ofSeconds*(10))

.ignoring(NoSuchElementException.**class**);

WebElement test = wait.until(ExpectedConditions.*visibilityOfElementLocated*(By.*id*("test")));

Q) What is Maven LifeCycle?

Q)Bug Lifecycle?

Has all stages that bug goes through during its lifetime.

It varies from organization to organization and also from project to project

In Jira:-

**New, Assigned, Opened, Duplicate, Differed, Not a Bug, Rejected, Reopened, Fixed, Retest, Verified, and Closed**

Q)Maven Commands?

1)What is Selenium Webdriver?

Selenium is an automation framework which provides the capability to interact with the browser and automate user actions on the browser.

Used for functional testing.

2)Components of Selenium framework

a)Selenium IDE

b)Selenium RC

c)Selenium Webdriver

d)Selenium Grid-used for automating parallel execution

2)Architecture of Selenium Webdriver?

Selenium client library(Code may be java,python) communicates with the browser drivers through JSOn Wireprotocol over htttp.

2)How to use selenium webdriver to automate a webpage?

Step:Set Systemproperties for browser driver

System.setProperty(“chromedriver”,”/path”);

Step1: Create an instance of WebDriver specific to the browser

Webdriver driver=new FirefoxDriver();

Step2: Launch webpage

driver.get(“url”);

Step3: locate html elements by inspecting DOM

WebElement e=driver.findElement(By.id(“username”));

Step4: Perform action on the element

e.click(); e.sendkeys(“uma”);

Step5: Run tests and generate reports using Test frameworks

3)Browsers supported by Slenium webdriver?

Chrome,Firefox,IE,Opera,Edge,HtmlUnit,Androiddriver

4)languages suppo by sWebdriver>

Java,Python,c#,ruby php, etc…

5)Pros:

a)automates dynamic webpages

b)supports multiple languages

c)can perform crossbrowser functionality

d)Supports parallel execution with TestNG

e) Selenium *WebDriver* allows a QA to view the live execution of the automated test run on the computer system as well as on any other CI/CD pipeline machine by supporting functionalities like the screenshot, video-recording of test cases, etc.

f)supports modern Software Development principles like Behaviour Driven Development (Cucumber framework)

*Why Selenium WebDriver is popular?*

1)Multibrowser compatability

2)Multilanguage support

3)faster execution than SeleniumRC

4)Supports waits

5)handle dynamic webelements using absolute xpath,contains() and startswith()

6)Selenium Webdriver Cons:

1)doesnot have inbuild reporting tool to generate reports, has to rely on third party plugins like TestNG

2)has to rely on compatability b/w browser driver and actual browser,functionality breaks if there is incompatabilty.

5)challenges during selenium?

Exceptions

IFrame with in IFrame

6) Frames? Why should u handle frames?

A) Frame is a webpage inside another webpage.

🡪NoSuchElementException is raised if u don’t handle exceptions

So, switch to frame

driver.switchTo().frame(webelementofframe)🡪IDvalueofframe,IndexvalueofFrame

Extra points:

Driver.swichTo().defaultContent();🡪move to actualwebpage of the frame

* Inorder to switch to a child frame, we have to first switch to the parent frame and then switch to the child frame
* > Inorder to switch from one frame to another frame at the same level on the page, we have to switch to the main page and then switch to the required frame
  + – Frame to Frame switching is not possible, if the other frame is not a child frame.

6) What is the difference between frame and iframe in Selenium?

Image result for iframes in selenium

Difference between Frame and iFrame in Selenium

A frame is used to divide a page into multiple sections, with new content on each section. An iFrame is used to embed the content of the external websites into the web page, in order to avoid cross-site scripting issues.

7) How do u find the element:

We are able identify the element using the automation tool called as selectorshub as its compatible with multiple browsers

Or

Manually by using inspect .

Using xpath :

Q)How many testcases do u run everyday

Depends on requirements ..sometimes I run 1 may be 2 testcases in a day sometimes 5-7 if its simple .. .it depends on what the requirement is

8)To avoid stale element exception?How u handled it

Reinitialize webelement

9)Diff types of exceptions in selenium

1) NoSuchElementException : FindBy method can't find the element.

2) StaleElementReferenceException : This tells that element is no longer appearing on the DOM page.

3) TimeoutException: This tells that the execution is failed because the command did not complete in enough time.

4)ElementNotVisibleException

5)ElementNotInteractableException

8)browser capabilities?

Capabilities are options that you can use to customize and configure a ChromeDriver session.

ChromeOptions chromeOptions = new ChromeOptions();

chromeOptions.setPageLoadStrategy(PageLoadStrategy.*NORMAL*);

chromeOptions.setAcceptInsecureCerts(true);

chromeOptions.setScriptTimeout(Duration.*ofSeconds*(30));

chromeOptions.setPageLoadTimeout(Duration.*ofSeconds*(30));

chromeOptions.setImplicitWaitTimeout(Duration.*ofSeconds*(10));

chromeOptions.addArguments("start-maximized");

9)Where u use javascriptexecutor?

What is the use for Jscript executor :

Mainly used for scrolling window

Alerts / windows

Perform action on disabled element

10) How do you handle broken links in Selenium?

a) Get list of all links using <a> tag.

List<WebElement> li=driver.findElements(by.tagName(”a”));

b)iterate each element get href next().getAttribute(“href”);

c) Send Http request for each link

d) Verify Response code.

e) Determine broken links using response codes

(>400)400->badrequest,URL wrong

404->Page notfound

11)Dropdown?

Use ‘Select’ Class

Get options using

e.getOptions(),

e.selectbyId(),e.selectbyValue(),e.selectbyVisibletext()

11)how to handle windows?

driver.getWindowHandle()🡪current window ID

driver.getWindowHandles().size()🡪no.of windows opened

12)how do u switch windows?

driver.switchTo().window(newwindow);

13)How do u switch to alert

A)driver.switchTo().alert()

//Wait for the alert to be displayed and store it in a variable

Alert alert = wait.until(ExpectedConditions.*alertIsPresent*());

//Alert alert = driver.switchTo().alert();

alert = *driver*.switchTo().alert();

//Print the Alert text value

System.***out***.println("The text in sample alert is : "+ alert.getText());

Alert.accept()->for OK

Alert.dismiss()->for CANCEL

12)Actions is a Class🡪mouse operations,

Actions class is an ability provided by Selenium for handling keyboard and mouse events.

Action class is defined and invoked using following syntax:

Actions action=new Actions(driver);

action.moveToElement(element).click().perform();

**Mouse Actions in Selenium:**

1. **doubleClick()**: Performs double click on the element
2. **clickAndHold()**: Performs long click on the mouse without releasing it
3. **dragAndDrop()**: Drags the element from one point and drops to another
4. **moveToElement()**: Shifts the mouse pointer to the center of the element
5. **contextClick()**: Performs right-click on the mouse

**Keyboard Actions in Selenium:**

1. **sendKeys()**: Sends a series of keys to the element
2. **keyUp()**: Performs key release
3. **keyDown()**: Performs keypress without release

Action is Interface🡪has build(),perform()

Build():-used to build chain of actions u want to perform

Perform():-used to execute the chain of actions u build using build method.

List of Mouse Actions:

1. click()
2. doubleclick: action.doubleClick(element).build().perform()
3. Rightclick: action.contextClick(element).buiold().perform()
4. DragandDrop: can do it 2ways
   1. action.dragandDrop(srcelement,destelement).build().perform()
   2. action.clickAndHold(webelement src\_elem).moveToElement(element).release(dest\_elem)

5. Mouesehover: actions.moveToElement(ele1).build().perform();

10) How do u perform scrolling in a window?

A) Using javascriptexecutor,

((JavascriptExecutor)driver).executeScript("window.scrollBy(0,1000)");

Q)How to perform KeyboardActions?

A) action.keyDown(Keys.SHIFT).sendKeys(“A”).keyUp(Keys.SHIFT).build().perform()

sendKeys()

keyDown()🡪press and hold keys

keyUp()-🡪release keys

Q) How to slide using selenium?

sendKeys(Keys.ARROW\_RIGHT)

please note Action is a interface and Actions is a class

Difference between Action and Actions class in Selenium

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

There are the following differences between action and actions class in selenium. They are as follows:

1. Action in selenium is an interface whereas, actions in selenium is a class.

2. Action provides two methods such as build() and perform() whereas, actions class provides various methods to perform complex mouse actions and keyboard shortcuts.

3. Actions class extends object class and implements an action interface.

13)Hybrid Frameworks

14)Root Interface?

SearchContext

15)Webdriver hierarchy?

SearchContext (interface)

|

WebDriver (Interface)

|

Chrome,gecko,IE,Safari (Classes)

16)Smoke

17)Regression

18) If you have 100 test cases to execute how wil you prioritize or select the testcases …

First I wil prioritize the test cases with lot of test data ic data driven test cases will execute first

Second I will execute regression test cases .. there are testcases we need to execute in every cycle

Of testing

Third … remaining testcases which needs automation

19)How r u taking screenshots?Steps

typecast driver interface to TakeScreenshot

How to take screenshots:

Used ITEstListeners: ITestResult Interface

ITestResult.FAILURE🡪returns 2

ITestResult.SUCCESS->returns 1

Syntax:

Public void method(ITestResult result)

{

if(ITestResult.FAILURE==result.getstatus())

{

TakesScreenshort tss=(TakeScreenshot)driver;

File src=tss.getScreenshortas(Outputtype.FILE)

FileUtils.copyFile(src,”//syspath”);

}

Q) What is TestNG.xml file (or) How do you execute your test cases ?

Ans:

TestNG.xml file is a configuration file that helps in organizing our tests. It allows testers to create and handle multiple test classes, define test suites and tests.

Structure:

< suite name=”Testing amazon website”>

< test name=”Regression test”>

<groups>

<exclude name=”abctest”/>

</groups>

<classes>

<class name=”packagename.testclassname”>

</class>

</classes>

</test>

</suite>

Advantages of testing.xml file:

* It provides parallel execution of test methods.
* It allows the dependency of one test method on another test method.
* It helps in prioritizing our test methods.
* It allows grouping of test methods into test groups.
* It supports the parameterization of test cases using @Parameters annotation.
* It helps in Data-driven testing using @DataProvider annotation.
* It has different types of assertions that help in validating the expected results with the actual results.
* It has different types of HTML reports, Extent reports, etc. for a better and clear understanding of our test summary.
* It has listeners who help in creating logs.

32)How did u log ur test results in console?

A) using logall() and asserall()

A) Using Log4j

step1: add dependencys

step2: create logger instance

syn: Logger logger=LogManager.getLogger(classname.class)

step3: Configure log4j by creatingus log4j2.properties file/ log4j2.xml file

Log Levels:

logger.info(“msg”);

logger.debug(“msg”);

logger.error(“msg”);

logger.fatal(“msg”);

33) Is there a way to type in a textbox without using sendKeys()?

Yes! Text can be entered into a textbox using JavaScriptExecutor

JavascriptExecutor jse = (JavascriptExecutor) driver;

jse.executeScript("document.getElementById(‘email').value=“abc.efg@xyz.com”);

20)findByElement()->noelementfound exception

findByElements()->no exception return empty list

21)xpath axes?

Ancestor

Child

Siblings…….Descendent

Parent

Following… following sibilings

Precedings

22)diff b/w @Factory and @DataProvider Annotations

An important difference between CSS and XPath locators in Selenium is that **CSS looks for elements going down the DOM, while XPath allows you to navigate both up and down**. This means that using XPath, you can find child web elements and then easily capture their parent or other ancestor.

23) Diff b/w POM and PageFactory?

PageObjectModel(POM): It is a designpattern where we have separate class files for each webpage.

Ex: have separate class file for loginpage and homepage.

PageFactory : It is one of d wy to implement POM,where it initializes all elements at a time using initElements() methods when the class object is created.

23)Diff WebDriver 🡪Interface and Chromedriver🡪Class

fastest driver is htmlunit driver(headless)

24)diff b/w xpath and CSS?

24) How to skip tests in TestNg?

@Test(enabled=false)

25)return type of window handles?

A) What is the return type for getting window handles .

Driver.getWindowHandles ,returns type is SET of Strings.. not LIST.

Set<String> or List<String> both are correct. If we use Set then we need use iterator method and if we used list then we need to use index number of particular window.

26)How u refresh?diff ways?

driver.navigate.refresh()

driver.getCurrentURL

Driver.navigate.to(url)

Also Sendkeys on any textbox in tht webpage

Q) Explain how you can login into any site if it’s showing any authentication popup for password and username?

A) Pass the username and password with url

* Syntax-http://username:password@url

ex- <http://creyate:tom@www.gmail.com>

Q) How will u Submit a form in Selenium?

A) element.submit()

Or

Element.click()

26)How to deletecookies in selenium?

Driver.manage.deleteCookie(arg[0]);🡪single cookie

Driver.manage.deleteCookieNamed(arg[0])🡪delete cookie byname

Driver.manage.deleteAllCookies();

27) how to handle nested iFrames

28) How do u handle captcha while automation ?

CAPTCHA (Completely Automated public turing Test to tell Computers and Humans Apart).

It is used for security purpose to check if the user trying to access appln is Human or Bot.

2ways to handle capchas

1. disable them in test environments
2. Adding waits and handle capcha manually

29) limitations of selenium?

30) Steps involved in regression

Selenium supports Regression testing and Functional testing.

Regression testing - It is a full or partial selection of already executed test cases that are re-executed to ensure existing functionalities work fine.

The steps involved are -

1. Re-testing: All tests in the existing test suite are executed. It proves to be very expensive and time-consuming.

2. Regression test selection: Tests are classified as feature tests, integration tests, and the end to end tests. In this step, some of the tests are selected.

3. Prioritization of test cases: The selected test cases are prioritized based on business impact and critical functionalities.

Functional testing - Functional Testing involves the verification of every function of the application with the required specification.

The following are the steps involved:

1. Identify test input

2. Compute test outcome

3. Execute test

4. Compare the test outcome with the actual outcome

31)diff b/w sele2 and 3 and 4?

32)how to get css properties?

Q)Why is Cypress better than Selenium?

A)Cypress is a great tool for API testing, which is not possible in Selenium. When it comes for cross browser testing, Selenium is the best choice because it supports almost every browser whereas Cypress only Supports Chrome.

TestNG Annotations:

**@BeforeSuite – Initialization of test report**

**@AfterSuite – Closing and publishing test report**

**@BeforeTest – Closing opened browsers, clearing session cookies**

**@AfterTest – Logout from applications**

**@BeforeClass - prerequisite for the module**

**@AfterClass – Post execution actions (ex. variable reset)**

**@BeforeMethod – Test data fetching from excel sheet**

**@AfterMethod – Test result writing to the excel sheet**

1) Out of 50 testcases, how you will run only the failed testcases?

**Method 1:** By using **testng-failed.xml** file in test-output folder.

**Method 2:**By implementing TestNG **IRetryAnalyzer.**

2) Difference between @Factory and @DataProvider?

@DataProvider gives you the power to run a test method with different sets of data, and

@Factory gives you the power to run all methods inside a test class with different sets of data.

3) Test Order in TestNG?

By default alphabetical order, set priority ,and using diff annotations

4) How to add/remove test cases in Testng.xml?

include, exclude tags in test.xml (or)

@Test(enabled=false)

5) Explain the difference between beforemethod, beforetest, and beforeclass-🡪used above setup() method

6) How to run the same method 100 times in TestNG with the same data?

@Test(invocationCount=100)

7) What is the reporting tool in your framework? and why?

A) TestNG

8) How can you configure tests in testng?

Get testingplugin from eclipse marketplace

Using Annotations

9) List out the testng annotation hierarchy order?

* @BeforeSuite.
* @BeforeTest.
* @BeforeClass.
* @BeforeMethod.
* @Test.
* @AfterMethod.
* @AfterClass.
* @AfterTest.

10) How you achieve parallel execution using testng?

***Advantages of Parallel Testing:***

*Reduces Time*

*Allow Multi-Threaded Tests*

***Disadvantages of Parallel Testing***

*Fails On Dependent Modules*

*Knowledge Of Program Flow*

In TestNG.xml:

<test name = "Parallel Tests" parallel = "classes" thread-count = "2">

“methods”,”Tests”,”Instances”

11) How many test cases can be automated in a day?

It depends on the number of steps and complexity of the test cases. There are days I have done 1 test cases and some days i have done 10 test cases. Some of the test cases you will spend all your time for finding the right locators none of the scripts won't be done. But Average you can say **3 to 5 test cases per day**.

12) How many suits can be there in testNG , what if I run all the suits?

We can have multiple suites in testng.

<suite name="TestNG Dadadriver suite" >

<!-- suite name="Suite Name" -->

<suite-files>

<suite-file path="./suiteA.xml" />

<suite-file path="./suiteB.xml" />

<suite-file path="./suiteC.xml" />

</suite-files>

</suite>

13) Syntax to perform parallel testing in TestNG and what do you write in <suite tag> also what do you mention in double quotes like p\_a\_r\_a\_l\_l\_e\_l\_ \_=\_ \_“ \_” \_

14)

JDBC Connections:How to connect DB using JDBC

// Declaration of the variables

private final String url = "jdbc:postgresql://localhost/dvdrental";

private final String user = "postgres";

private final String password = "root";

public static String fname = null;

// Method to initalize connection to the database and execute query public void connect() {

try {

Connection conn = DriverManager.getConnection(url, user, password); {

if (conn != null) {

PreparedStatement pst = conn.prepareStatement("select first\_name from actor where last\_name = 'Lollobrigida'");

ResultSet rs = pst.executeQuery();

{

while (rs.next()) {

fname = rs.getString("first\_name"); System.out.println("The value from the table is : "+fname);

} }

} else

System.out.println("Failed to connect"); }

} catch (SQLException e)

{ System.out.println(e.getMessage()); } }

----------------------------------------------------------------------------------------------------

GIT Commands

Git is a version control system that lets you track who made changes to what when and has options for easily updating a shared or public version of your code on [github.com](https://github.com/).

**Prerequsites: login using git account, create repo/use existing (have a repository)**

**Installation of Git:**

1)Bash(if windows)(bydefault mac has Bash shell)

Git(install mavericks)

2)Once download,install it

3)in terminall $git –version

if it asks XCode download,download and try again

$git –version

returns version 2.5.4 if successfully installed

4) u need nano ,mac bydefault hasit

$nano –version

returns version no.2.0.6

$nano 🡪opens texteditor

**Setup /Configure Git after installation**

1) **Questions**

* How do I get set up to use Git?

**Objectives**

* Configure git the first time it is used on a computer.
* Understand the meaning of the --global configuration flag.

Commands:

------------------

$ git config –global user.name “ur name”

$ git config –global user.email “ur email” (use same credentials used to setup git account

$ git config –global core-editor “nano”

use this cmd if u forget git-options-🡪$git help

Q)What is versioncontrol?

A version control system maintains a record of changes to code and other content. It also allows us to revert changes to a previous point in time.

Helps collaborating on single project.

Helps track your files /code in ur project

Types:

GitHub

Subversion

------------------------------------------------------------

**How to Clone,add,commit,push to Git**

* Create a new repository on GitHub
* Clone your repository to your local computer
* Modify files in your repository and track changes using commits with git
* Push your changes back to GitHub

1. In the upper right corner, click the + sign icon, then choose **New repository**. Create new repo.
2. Then,on ur new repo page, click on **green** button, 🡪 select **clone with HTTPS section and copy ur repo URL**
3. Now in the terminal change to

**cd dir-🡪**which directory where u want to clone your rep**o**

**$ git clone “urlpath of ur gitrepo”**

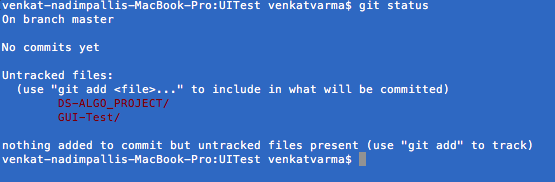
**ask for git-repo-username:**

**git-password: enter access token**

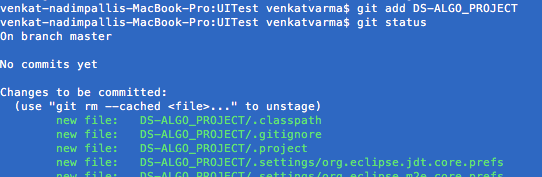
**Share ur project files from eclipse to local repo, by**

🡪rightclick on project🡪team🡪shareproject🡪enter ur local repository directory path🡪finish.All ur project will be now in local repo

1. $ ls –a 🡪displays list of files in ur repo
2. $ git status

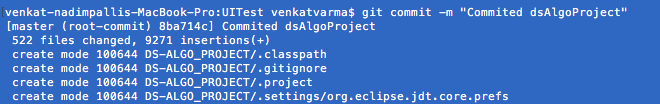
****

1. Move the files from working directory to staging area

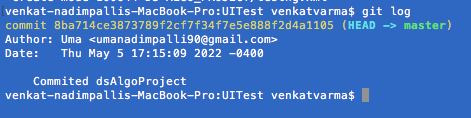
****

1. **Commit**

**Cmd: $ git commit –m “commited xyzproject”**

****

1. **Git –log**

****

1. **PUSH changes to GitHub:**

So far we have only modified our local copy of the repository. To add the changes to your git repo files on your computer to the version of your repository on GitHub, you need to **push** them GitHub.

Command:

**$ git push** [**https://github.com/umanadimpalli/GUI-Test.git**](https://github.com/umanadimpalli/GUI-Test.git)

**Your project is on GitHub Repository!!!!!!!**

Project Related Questions

-------------------------------------------

1)What is Maven?

Maven is used for Project Management. It helps u build ur code/project with less human intervention once u have written POM.xml . It has all the plugins(under <build>), dependenys ( under <dependency>) needed for ur project.

2)What is TestNG?

TestNg is a testing framework used to create,run and generate reports for ur tests. U

3)What is POM.xml?

**4)What is TestNG.xml?**

**5)**

--------------------------------

CUCUMBER QNS:

------------------------

1. What is Cucumber ?

Cucumber is a tool that supports BDD .It helps project/software teams to understand the application without going deep into technical aspects. Uses Gherkin language to define appln behavior.

1. What is BDD

It is s/w development process which helps teams, bridges communication gaps b/w various project stakeholders like business analysts,develop,testers without going deep into techinal aspects.

1. What is Gherkin Language?

It is a language used by cucumber to define appln behavior.

It has keywords like:

Feature

Scenario

Scenario Outline

Given

When

Then

4) What is a feature file?

Feature file has high level functionalities of an application under test(AUT).

It starts with keyword Feature->that describes functionality of appln

It has .feature extension.

5) diff keywords used to write scenario?

Given, When ,Then, And

6) Purpose of Scenario Outline ?

It is used for parametarisation, like if u have multiple test data to execute same scenario, go for Scenario outline.

It should follw Example keyword , where we pass the testdata.

The steps use <>delimited parameters that represent headers of the example table.

Pipe symbol | is used for parametarisation.

7) What is StepDefinition File?

It has the implemented code of the featurefile.

Each step in the featurefile is mapped with the corresponding method in the stepdef file.

8)Major advantages of CucumberBDD?

1)opensouce

2)helps teams,by closing gap b/w businessanalysts,dev,testing teams in understanding the application.

3)automated testcases developed using cucBDD r easy to maintain and understand

4) Easy to integrate with other tools like,selenium

9)Provide example of Scenariooutline in cucumber?

A)

Feature: Login Functionality

Scenario Outline: Enter valid User Credentials

Given: User is on loginpage

When: User enters <username> and <password>

Then: User should login to his account

Example

|username|password|

| uma | @xyz

| nadimpalli| $123 |

10)What is the max no.of scenarios we can have in a featurefile?

The max. no. of scenarios is 10, but depends from project to project and from one organization to another.

11) Use of Background Keyword in Cucumber?

Background keyword is used to define common steps that r in all the scenarios.

Example:

If u r testing an E-commerce website where u r writing scenarios to test “add product to cart” and “do payment” functionalities.

Here login to the E-commerse website will be common for all the scenarios.

In this case ,u can write login steps in the ‘Background’

Feature: Addtocart functionality

Background : User is logged into E-commerce website

Given: User navigated to loginpage

When: User enter credentials

Then: User should be logged in

Scenario: User searches for a product add product to cart

Given: User searches for a product

When : User clicks on add to cart

Then: Product should be displayed in cart

Background is run before all scenarios but after any of ur @Beforehook

12) Diff b/w background and hooks in cucumber?

Background is run before each scenario but after any @BeforeHook in the TestSuite.

Hooks are executed before all Scenarios and after all scenarios.

13) What symbol used for Parameterization?

Pipe symbol-🡪 |

14) What is the purpose of Example keyword?

Used to provide test data for the parameters defined in the scenario outline.

15) What is the file extension of feature file?

.feature

16) What is the purpose of cucumber Options tag?

It is used to provide link b/w featurefile to the corresponding stepdef

@CucumberOptions(features={“Feature”},glue={“stepdef”})

17)How did u integrate selenium with cucumber?

A) by adding all necessary Jar files.(dependencys)

a)Cucumber-core

b)Cucumber-java

c)cucumber-jvm-dep

d) selenium-java

d)JUnit

e)Cucumber-JUnit

18) What do u need to use Cucumber Framework?

A) need Cucumber Plugin (Add from Eclipse marketplace)

Add Dependencys in ur POM.xml

1. Cucumber-core
2. Cucumber-java
3. Cucumber-jvm-dep
4. JUnit
5. Cucumber JUnit

19)Purpose of keywords used in writing a Scenario?

Given: used to define precondition

When: define what action we r performing

Then: Expected result of the action performed

And: used to combine multiple stmts into single stmt

20) What plugin is used to integrate cucumber in Eclipse?

A) Cucumber Eclipse Plugin is use dto integrate it with eclipse

21) What is RunnerClass in cucumber?

A) It provides link b/w featurefiles and stepdefs.It is an empty class with no class definition.

Ex:

@Runwith(Cucumber.class)

@CucumberOptions(features={“Feature”},glue={“Stepdef”})

public class Runnerclass

{

}

22) What is the starting point of execution for feature files?

A) Runner Class

23) Should any code be written within the TestRunner class?

A) no code should be written in runner class.

Should have only @RunWith and @CucumberOptions

24) What is the use of features property under the Cucumber Options tag?

It is used to tell the location of the Feature files.

25) What is the use of glue property under the Cucumber Options tag?

It is used to specify location of stepdefenition class

26) What is the maximum number of steps that are to be written within a scenario?

A) 3-4 Steps

27) What is Dry-run in Cucmber Runnerclass?

A) Dry-run is used to check if there r any Compilation Errors. It can be set True/false. If True it displays compilation errors, it check if for everystep of the feature file, the corresponding stepdef code is written or not.

28) What are Hooks in Cucumber?

A) Hooks helps to optimize our code. Block of code tagged with hooks are executed before all scenarios with the help of @Before hook and after all the scenarios using @After hook

Sometimes Scenarios has some preconditions, like browser setup,navigating to webpage, launch the appln, establish database connection, configuring testdata ,instead of repeating same code in all scenarios, use @Before hook to define that block of code.

And also some post conditions like closing the browser, closing db connections, appln Signout usen @After hook.

Examples

28) Diff b/w TDD and BDD?

Both s/w development techniques.

30) What is TestPlan ?

A) It is a document that has information abt foll to complete particular project

Test objective

Tasks

Scope

Resources

Environment

Estimations

deadlines

30)What is regression testing?

We perform As soon as we get build from developer

Regression test is performed after every build bugfixes and after any new features added ,to make sure it doesnot have any impact on other functionalities of the system.

31)Challenges u faced during Regression testing?

A) We perform regr test after every build(bug fixes and added features).I have spent some time on regression test after everybuild.In Agile🡪sprint cycles r smaller🡪performing regression testing is challenging

32) Can u tell how u pick testcases for regression testing?

How do u prioritize ur testcases for regression if u have 100testcases with limited time?

A) I pick testcases based on

a) testcases that belongs to particular module where the bugs r fixed

b) also check the dependent functionalities of the fixed module.

33) What things u should consider before going for Regression Testing?

A) check the Regression suite and check if all testcases are covered or not as part of regression. Review them and go

34) Is regression test performed manual/automation?

A) As we run RegrTests after every build, doing manually needs time and effort(repetitive task). Advantage of Automation is we can automate the previous build testcases that passes, and the rest of the new functionalities we can perform manually.

35) Diff b/w Regression and retest?

A) Retesting means Testing same feature multipletimes with diff sets of data.

Regression includes retest, also tests other dependent functionalities (or impacted areas)

31) How do u perform Regression Testing?

36) Difference b/w Smoke and Sanity testing?

A) Both are performed before Regression testing.

Both are performed to avoid cost and time involved in more rigorous testing.

Smoke Testing: We choose testcases that cover important functionalities.tests only the critical functionalities. tests End to end .

Performed by dev or testers. Tests the stability of d build.

Example: appln is launching successfully or not, GUI is responsive

Sanity Testing: is performed on module of a system,to check if the bugs r fixed and test new functionalities.

Performed by testers.

37) End to End Testing?

A) Tests complete functionality.

31)Do u run all testcases while performing regression Test?

A) Yes,we should run all testcases while regression Test to make sure the bug fixes/additional features added doesnot effect functionality of existing system.

32) Unit testing?(Whitebox)

A) performed by dev .Tests individual module functionality/logic.

33) Integration Testing?(Whitebox)

A) performed by dev. Comes under whitebox testing.Tests how modules r communicating with other.

34)System Testing?(End to End Testing)Performed by QA’s

A) Testing entire system,with respect to client reqment.Testa End to End

System Testing is of 2types

1. Functional Testing: GUI testing, Frontend, Database is working?Tests behavior of system.
2. Non-Functional Testing: Once system is stable them conduct Performance, Security, Reliability ,Load, Stress Testing

35) What is verification and Validation ij tresting?

A) Verification: Verifys Correctness & Completeness of documents.(before s/w devp)

Validation: checks if system is working as expected by the customer requirement.(after s/w dev)

36) GUI Testing?

A) Fonts,spellings,alignments, textboxes,checkboxes,radiobuttons,links,dropdowns

36) Input domain Testing? Techniques used to perform Input domain Testing?

A) ex: txtbox: Enter:lower case a-z ,allow 8 characters

Equivalance Class Partioning: verify valid/invalid data

Boundary Value Analysis: Range of values.Tests boundary’s instead of all values.Ex:1---------8 checks 1and 8 and checks -1 and 9

37) Database testing?

A) If we perform CRUD operations on GUI checks if it effects backend db or not.

38) Load /stress Testing?

A) ex: if client says appln should handle 100 users at a time.

Load: tests 10,20,30,40,50,….100 increases load gradually

Stress: tests 10,50,20,90…increasing load at a time and checks appln stability

39) Test design techniques used while writing testcases?/while creating testdata?

A) Equivalence Partitioning

Boundary Value Analysis

40) What is Exploratory Testing?

A) Testing appln functionality without any testcase documentation and try to understand the appln flow.

RealTime Testing Qns:

1. Testing process followed in ur pjt?

Followed agile.

team lead assigns userstories,our team go through and understand userstories and then write testscenarios, testcases.did self,peer and lead reviews and execute the testcases ,once the build is released.find defects->update jira->once dev fixes bug->re-run the testa/do regression test bases on the defect->if bug is fixed then closes the defect in jira->if bug not fixed reopen the issue->moves to the sprintbacklog.

End-End Agile Flow:

Product Owner creates Product backlog-🡪We will have Sprint Planning meeting where we select storys for the sprint, decides the duration of sprintcycle and estimation points r created-🡪dev /QA create tasks🡪userstorys r assigned🡪have everyday scrum meeting🡪tasks should be finished by end of sprint🡪after every sprint, have sprint review meeting.

1. Burn-up ,Burn down charts charts->used to keep track of the progress of d project.

Burn-up charts: Represents the work that is completed in project

Burn-down charts: Represents remaining work in d project

1. How do u report a bug?

Before reporting bug to developer, verify if it is reproducing with diff testdata,envts and then report.

Using Jira🡪create defect🡪assign priority🡪report to dev by providing teststeps ,screenshots, testresults

1. What r ur day-day activities ?
2. My day-day actv include attending, daily standup calls and sprint review meetings after sprint, writing testcases, excecuting testcases, rerun failed testcases, takings screenshots of failed testcases and documenting testresults, reporting bugs if found any.

Project Related Qns:

1)Explain ur Project?-->Domain,Client,Technologys used,teamsize,talk about functionality of pjt

2)How many people u have in ur team?

A) 9 🡪 1-architect,1-manager,3-dev,2-testers,2-operations team

3)How many testcases have u written for ur pjt?

A) depends on size of project,

Small pjt (3months) 🡪 150\*3= 450approximately 15-20 bugs reported

Medium (6months)

Large pjt (

1. how mant TC u write perday?
2. 15-20 small
3. 5- large

5)How many bugs u reported?

Depends on project approximately 15-20 bugs reported

1. You reported bug to dev,but dev envrnmet not rereproducing bug intheir envt?
2. It should work on QA environment, do detail debugging like analyse the root cause( may be test on diff envts, memory os,browser issues)

6) If the devoper doesnot accept(defect not produced in dev envmt) the defect,what do u do?

Talk to the lead/product owner(who wrote userstory)

1. What r diff test metrics u follow?
2. % of testcases ,how many valid defects reported
3. How will you overcome the challenges faced due to the unavailability of proper documentation for testing?

* Screenshots
* A previous version of the application
* Wireframes

Also clarify doubts with businessanalyst and developer

Automation Framework used in ur project Qns

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1. Tell me about yourself?

As you know, myself Uma.

I am currently based out of Grand Rapids,michgan.

I have around 6 years of ITExperience working as QA Analyst ,performed both manual &automation operations, worked on corejava/j2EEtechnolo and worked on automation tools sele,testing,cucumber,restassured.

Coming to my job responsibilities and project workflow:

We followed agile methodology.Our teamlead used to assign stories,Once analyzing and understanding user story ,start working on test scenarios , testcases->signoff from lead, start writing testscripts 🡪executing the testcases ->generate reports-🡪any bugs found->create as defect on jira and assign to developer—>once fixed by dev->rerun/regression tests —>if all runs are passed, no bug is raised, close the issue—>else reopen the issue move it to backlog.

and also automated testcases by writing testscripts using selenium webdriver and performed cross browser testing to check the appln is compatible with multiple browsers.

and also performed backend API testing using postman & SOAPUI, also used rest assured for automating backend tests. Performed Functional and end to end testing

and also performed UAT by writing UAT doc’s for application team and endusers and worked closely with them until testing is finished and get signoff (before moving to production environment.)

1. What are your Role and Responsibilities?

Same as above

3) Architecture of your current/previously worked application?

A) Highlevel architecture is Workday🡪Sailpoint-🡪ActiveDirectory

Highlevel Usecases :

4) Which Automation framework you are using in your organization can you tell me the folder structure and flow of your framework?

A)

In my project, I used Data Driven Framework, by using Page Object Model design Pattern using Page Factory.

We implemented it using Selenium, TestNG, and JAVA.

As per page object model, we have separate page classes for each webpage (which has elements and functions) under Page Package and all the test classes under TestPackage.

For Example :

Homepage and Loginpage has separate page classes and for Login Test there will be separate class which calls the methods of the Home page class and login page class.

ProjectStructure:

Packages:

Src/test/java:

Base

Pages

Tests

Utils

Listeners

Src/test/resources:

Testdata folders:

propertiesfile 🡪config.properties

and EXCEL files

Folders

Driver- binaries of browser driver

Test-output – reports by testing

POM.xml-🡪 project, configuration details(plugins,dependencies)

TestNG.xml🡪where all tests are executed

Hierarchy: Suitename->Testname🡪parameter-🡪all classes in the test

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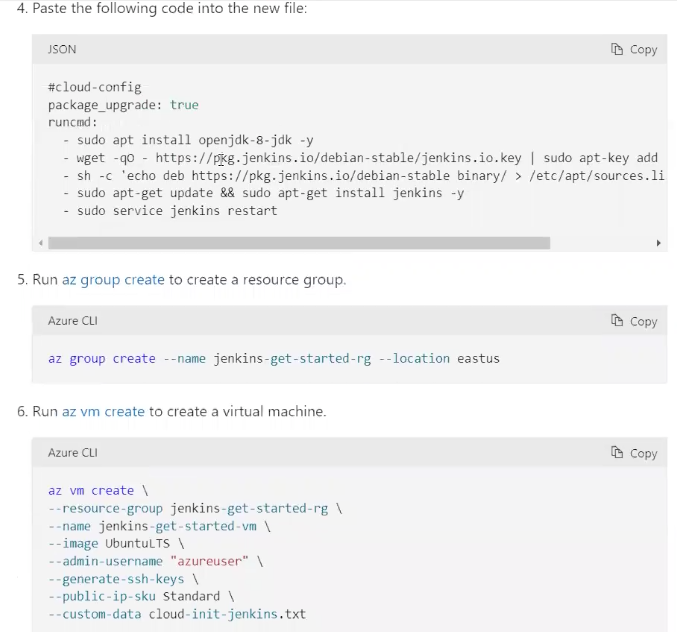
Jhenkins CI/CD

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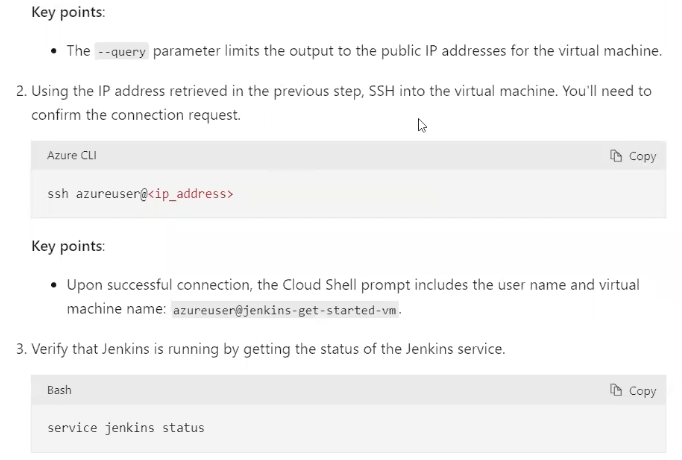
How many diff ways do you trigger job in CI/CD?’

**Azure - Jhenkins CI/CD**

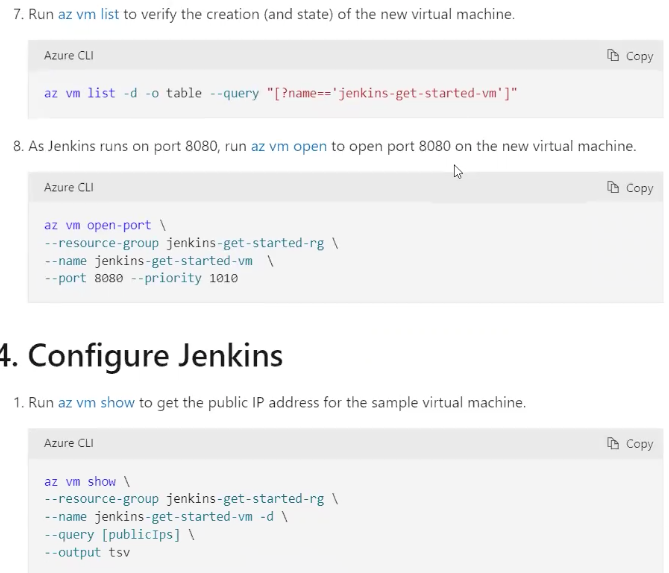
1. Created VM in Azure



* SSH to VM (connected to VM)



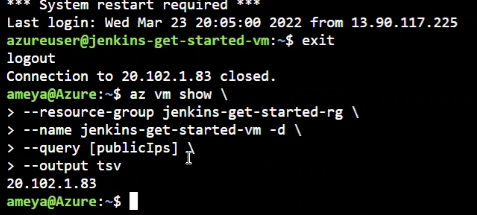
* Install Jenkins in Azure Linux
* Start Jenkins
* Open 8080 port (default Jenkins)



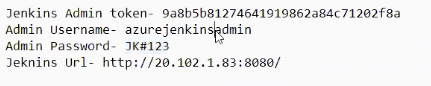
* SSH to VM (connected to VM)



* Get public ip



* Access Jenkins with public ip and port 8080

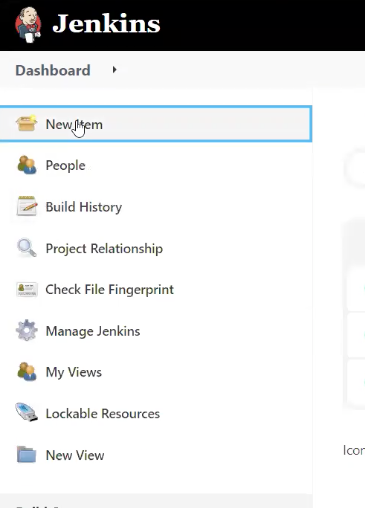


1. Jenkins configuration
2. Install required plugins like Maven

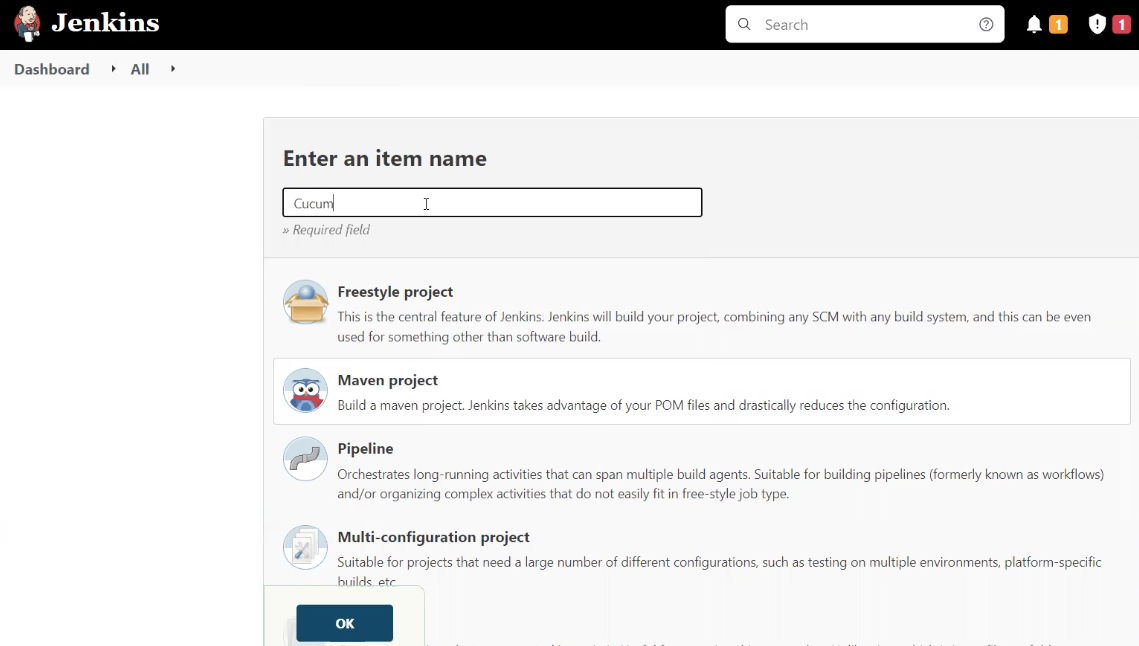
* Global tools configuration under manage Jenkins (Provide Java/jdk home, maven home) also can provide git details

1. Created a job in Jenkins

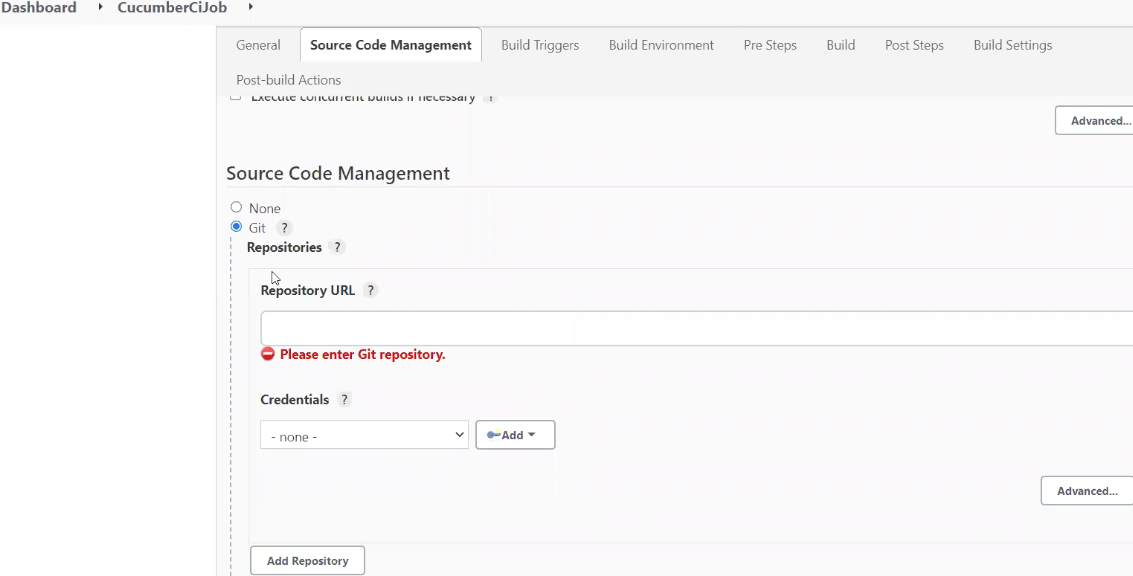
* Create a New item



* Select Maven project
* Enter the item name

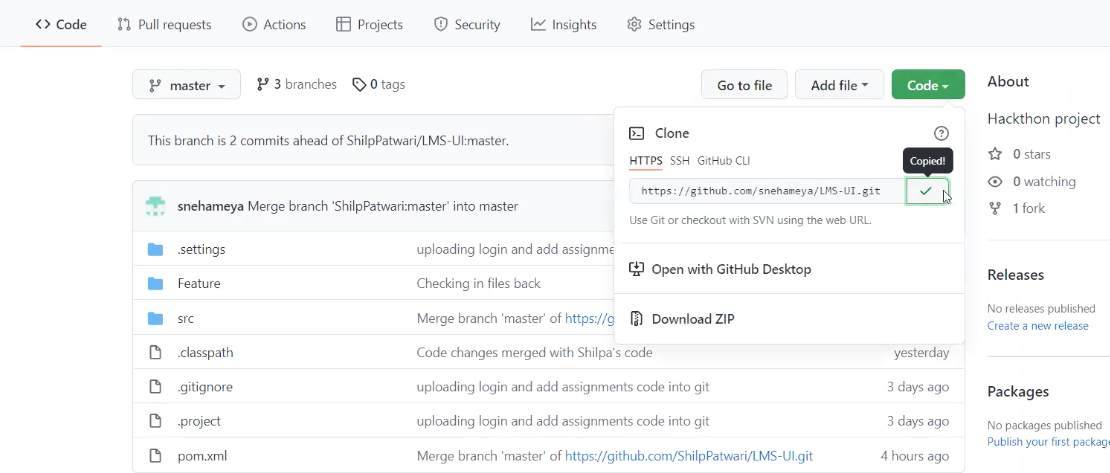


* Select the source (Source code management)
* Select Git (Source is coming out of Git)

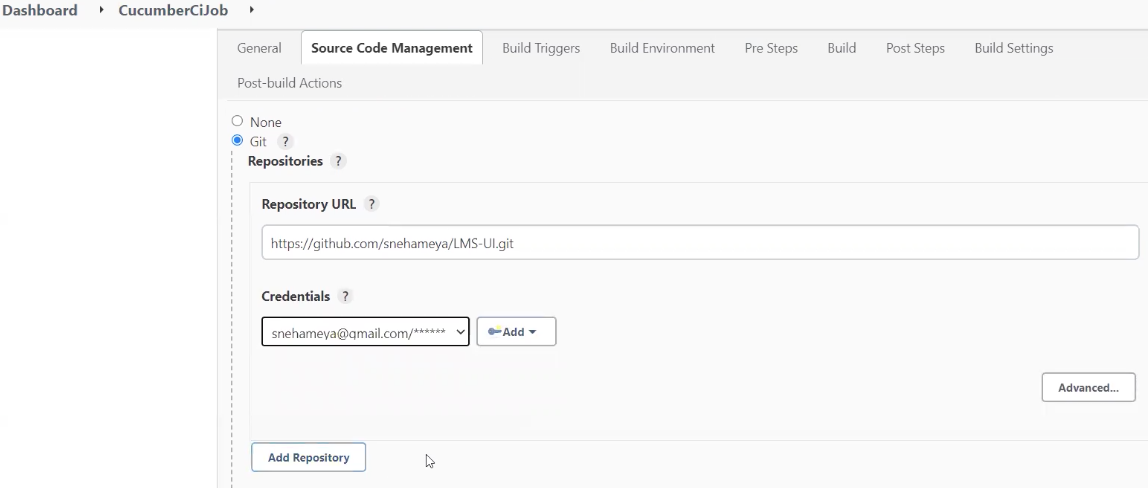


* Get Github url from GitHub

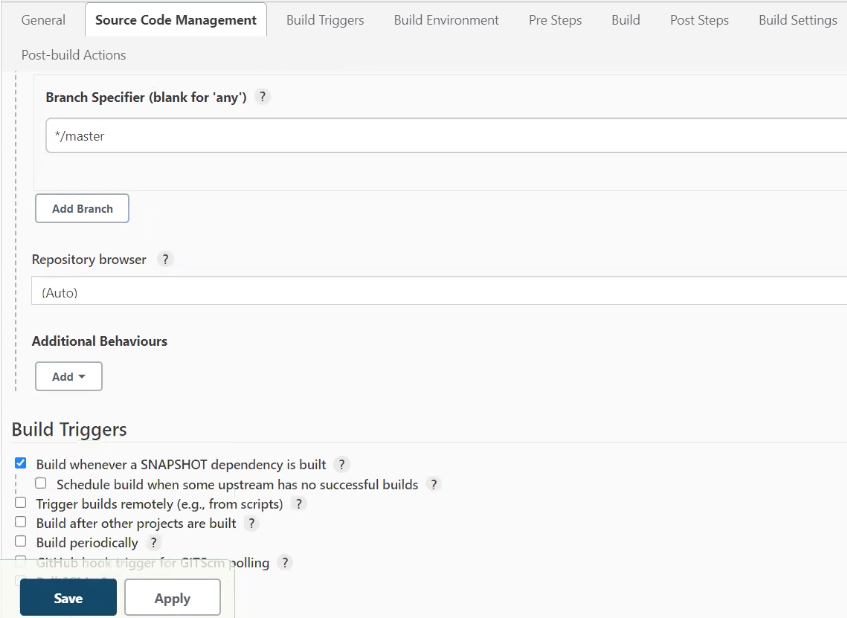
Note: Need web hook to give the URL.



* Enter the GitHub URL
* And add Credentials

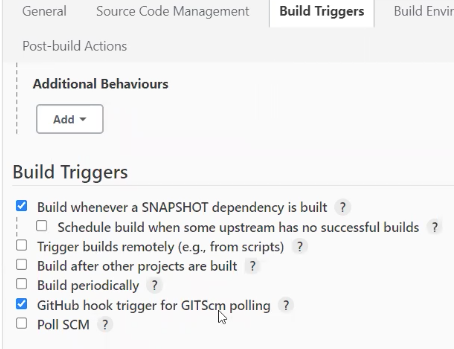


* Specify the branch details



This is the place where are saying monitor my git repository, keep polling my Git repository and when you see an new code getting push to that repository on that particular branch start my job, for that we have to enable the web hook (GitHub hook trigger for GITScm polling)

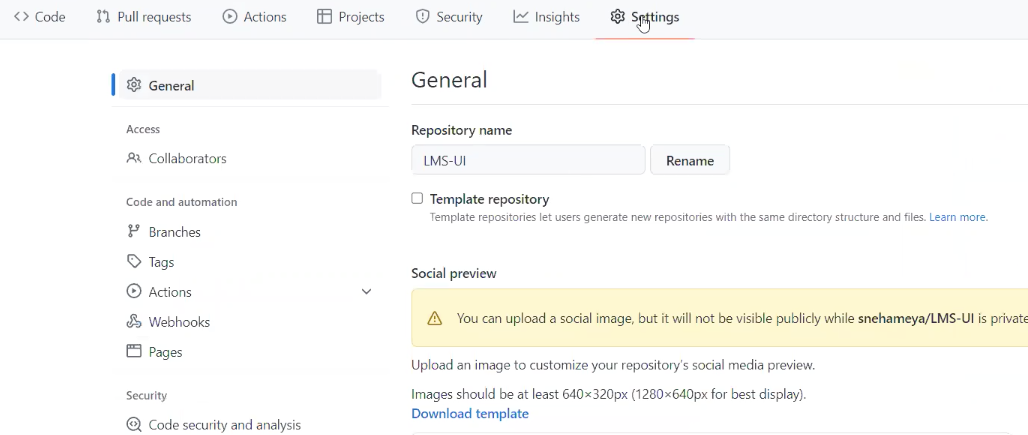
You should own the repository to create web hook on it

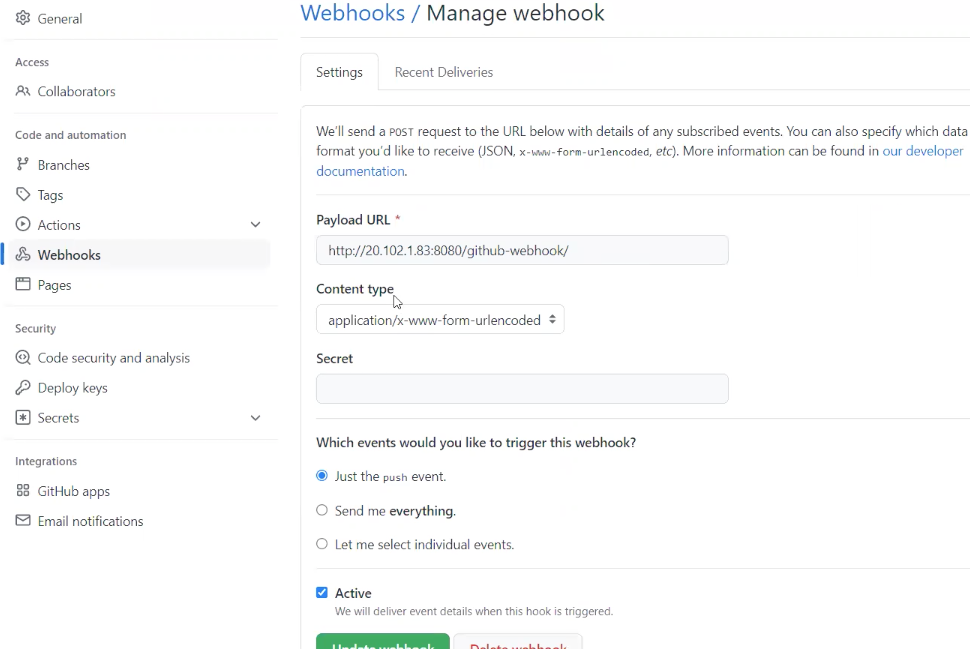


* Webhook in Github

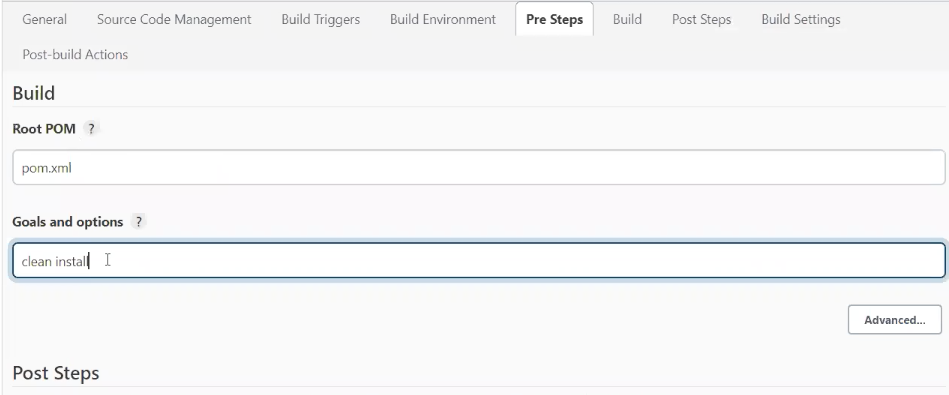
Click on settings



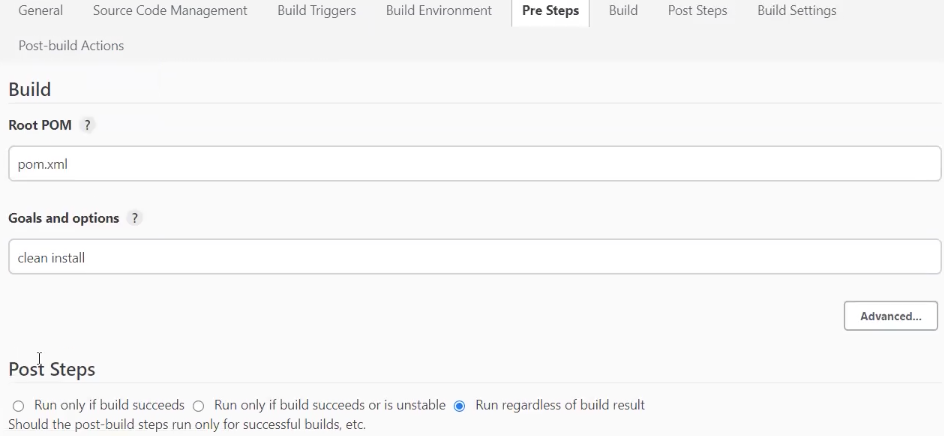




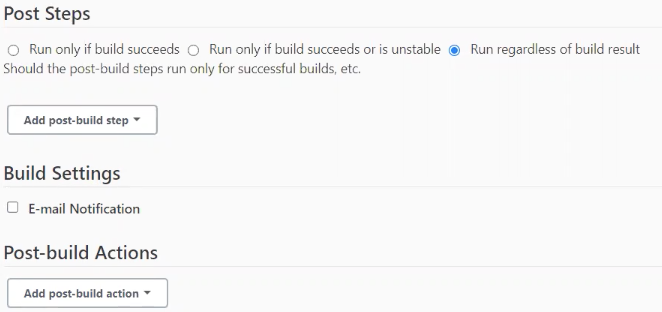
* We told that when to invoke
* Where is my Github.
* On push event it takes the payload and sends it to the end point and based on the payload GitHub knows that this is the repository push has happened and this repository is tied up with job so it starts this job.



* Notification to kick of the maven build ‘Clean install’
* Get the source code from my repo and poll this repo for any push and whenever there is push run this

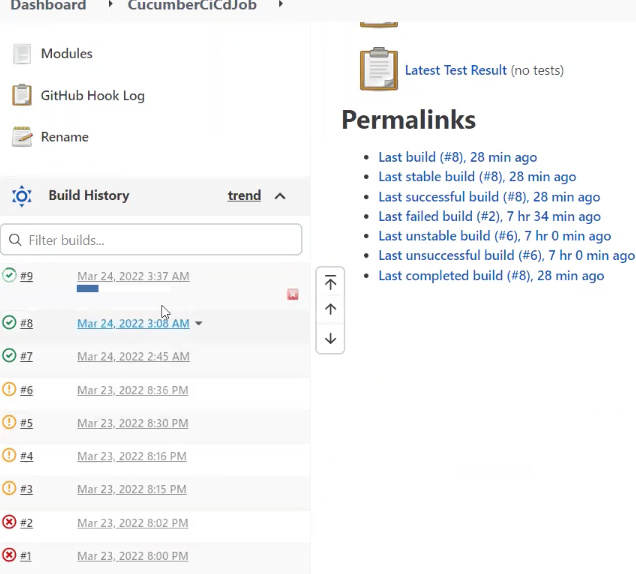


We can send a notification that job is completed or build is successful.



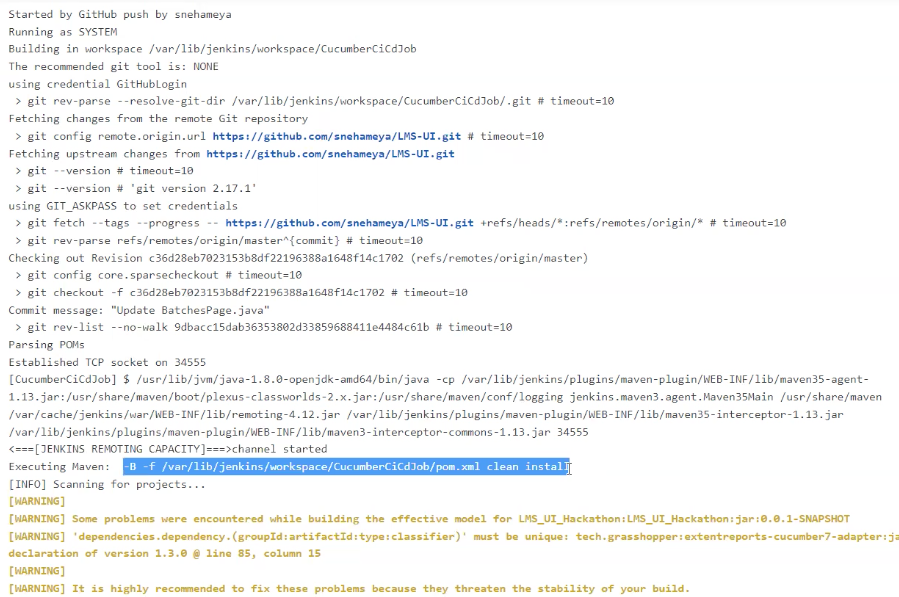
* In GitHub push some changes to the repo

Make some changes to the source code it should kick off build in Jenkins We can observe as below



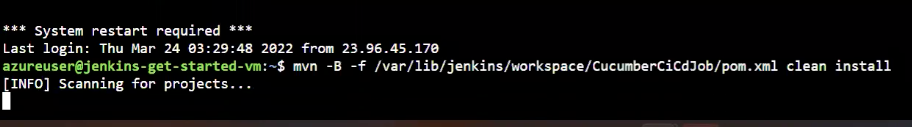
It’s getting source code from GitHub repo and running the Pom.xml

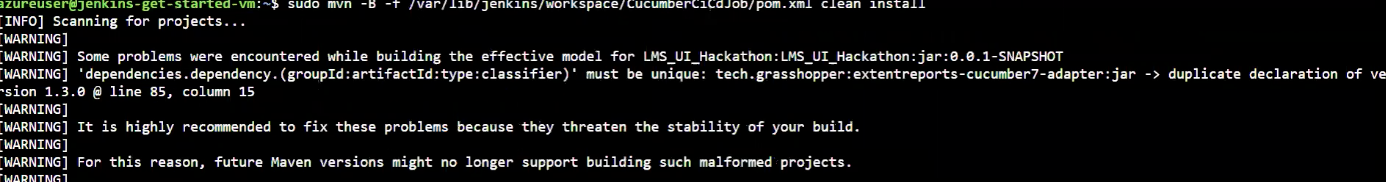


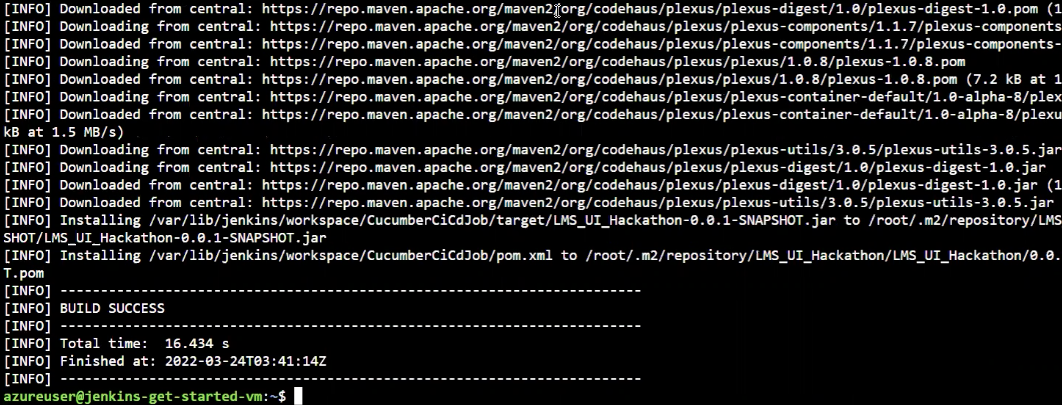


* We can run the same command directly on the VM

Run as admin







**API Testing Qns:**

* 1. What is Postman?

Ans:

* 1. Structure of API request?/ What are the various pieces of information that make up API request?

Ans: Every web based API request has following

1. End point : provide URL for locating resources on a server.
2. API actions: summarized with acronym CRUD.
   * 1. GET – read information about objects.
     2. POST – Create new objects.
     3. PUT – modify existing objects.
     4. DELETE – delete objects.
3. API Parameters

a. Request parameters - Get particular information about different objects that are all the same type. Represented using {}(inside curlybraces)(eg: /users/{username}) or :(colon)(users/:username)

b. Query parameters – Acts like a kind of filter or additional action that can apply to an endpoint. Represented by ? and the data is represented in Key(item) and Value(value) pairs.

1. API headers
2. API body

Used for creating/modifying resources with an API.

Used for post/put requests, often require some form of authorization since they allow you to modify data.

1. API response

HTTP response codes:

200- Successful GET,

201- Successful POST request

500- fail- Internal Server Error

404- Not found- server couldn’t find requested resource

400- Bad request- syntax error

* 1. Authencation, Authorization?

Ans.

Authentication: System checks who you are, validates user credentials (username, password)

Authorization: System checks what you can do, checks what kind of actions you can perform.

Selenium Qns :-

Q)