**Selenium Questions**

**What is software testing?**

**Types of testing?**

**What are levels of testing?**

**Types of testing ?**

**What is selenium ?**

**What is selenium ?**

**Web driver is an interface.**

**Why we use selenium tool rather then other tools???**

**Advantages and disadvantages of selenium web driver. – support ,os, programming language, multiple browse**

**Disadvantages;**

**There are two methods to get navigate**

**What is difference in close (); and quit(); method.**

**What is web element ???**

**What is DOM?**

**WHAT IS css ??**

**What is locator ??**

**Why we do need locators in selenium???????????**

**How many locators are there ??**

**Name the locators**

**What is attribute and what is values**

**Why there are so many locators ?? because some locators have duplicate values like id=”txt” and for other element id=”txt”**

**Three reasons**

**1. duplicate values**

**2. developers can t provide all locators for single element**

**3. link text is not applicable for button or other text box .**

**Some of the locator are not applicable to all the elements, like links.**

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**Class 3**

**What is x path??**

**What is x and css selector path???**

**What are the types of x path???**

**Absolute x path? It always start with single slash and from very first tags <html>**

**Relative x path? It starts from any tags and double slash use**

**Advanced x path ??? in advanced x path we use parent, ancestors, siblings , child keywords.**

**//input[text()=’hello’] ---- text is not an attribute that s why @ not used here.**

**Contains method //input[contains(@class , 'inputtext')]**

**Starts-with method //input[starts-with(@class,'inputtext')]**

**//input[@id='calFromDate']/following-sibling::img**

**Why we need advanced x path??**

**When we can-not locate element by relative x path , then we need advanced x path**

**--preceding-sibling::tagename**

**--following-sibling::tagname**

**--/parent::tagname**

**/child::tagname**

**/ancestor::tagname**

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**SELENIUM CLASS 04**

**What is css selector (cascading styling sheet)**

**In css class attribute is represented by dot . input.text**

**In css class id locator is represented by # sign input#text**

**This is element example <label class="\_58mt" for="u\_4\_4\_3B">Female</label>**

**CSS syntax for class; label.\_58mt 🡨---- here dot (. ) mean class attribute**

**CSS syntax for ID.**

**Tagname#IDvalue**

**button#loginbutton 🡨------ here # sign mean ID locator.**

**this is contains method in CSS**

**input[type \*='text']**

**CSS this is starts -with method in css.**

**input[attribute ^='starting attribute value']**

**CSS ends-with method**

**input[attribute $='ending attribute value']**

**img[src$=svg]**

**disadvantages of css selector ??**

**1. don not have text method as in x path**

**2. we can not go forward and backword as in x path siblings, parent**

**3.we can not use those values which have space, because css has no “” quots.s**

**4.don’t use large values only attribute with small values.**

**What is web element commands ?? the commands which show the state of web element on web page.**

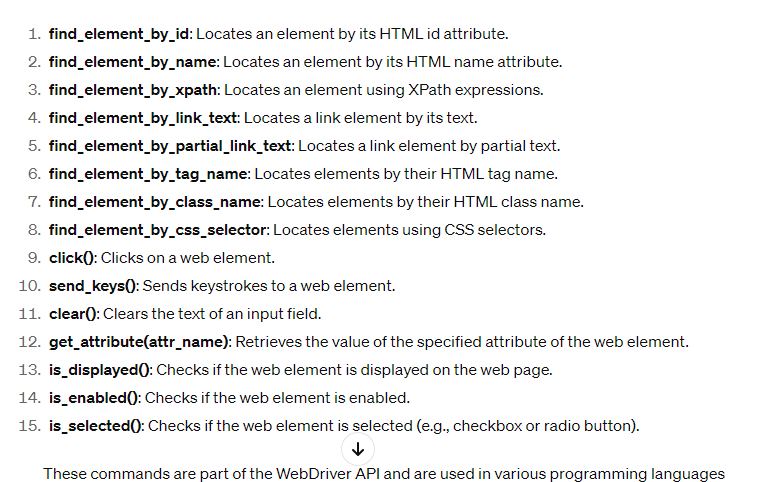
**isEnabled**

**isDisabled**

**isSelected.**

**Is diplayed**

**What is mean by state of element? is physical condition/property of any button, checkbox, link, radio button.**

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**Get text method**

**Get attribute methods**

**Is empty method**

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**Selenium class 05**

1. **Radio Button**: A GUI element that Allows selecting only one option from a list, deselecting others automatically. Represented by small circles.
2. **Checkbox:** A GUI element that Allows selecting multiple options independently from a list. Represented by small square boxes.
3. **Dropdown:** A GUI element that Displays a menu of options from which one can be selected. Users click to reveal available choices and select one from the list

**Types of dropdown?**

**1.single select**

**2.multiple select**

**If you will use select class then you do not need to click method.**

**What is select class in selenium??**

In Selenium, the Select class is used to interact with dropdown menus or select elements on a web page. Dropdown menus in HTML are represented by <select> tags.

**The Select class provides methods to**

1. select options,
2. deselect options,
3. get all options, get the selected option, etc.

**How to handle drop down?**

**1. Select class use , there should be select tag in html.**

**There are three ways** to select an option from dropdown

1. By index
2. By visible text -- this is preferred way to select
3. By value --- value of attribute

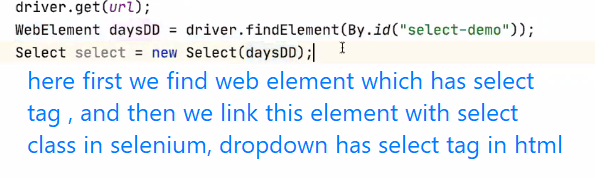
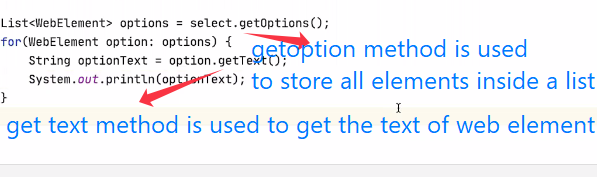
**There are four deselect methods for deselect method drop down should be multiple select drop down**

1. Deselect by index

2. Deselect by visible text

3. Deselect by value

4. Deselect all



This is method to check drop down is multi select or not

Select select=new Select(element);  
boolean multiple=select.isMultiple();

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Selenium class 06

**What is alert???** Alert is pop up message that takes complete focus of main page.

You can-not proceed before handling

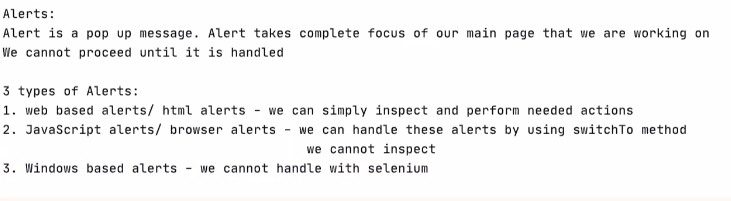
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Alert is a class in selenium which is used to switch selenium web driver to get access of Alert which are written in java script language

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Selenium lose its access when an alert is pop up because selenium has only its access on webpage/web applications, but pop up alert is outside of webpage so to interact this we use alert class.

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**Java script has three types alert;**

**Simple Alert:** This type of alert only contains a message and an OK button to close the alert.

**Confirmation Alert:** This type of alert contains a message, along with OK and Cancel buttons. It allows the user to confirm or cancel an action.

**Prompt Alert (amaada krna);** This type of alert also contains a message, along with text box where the user can enter some text OK and Cancel buttons as well.

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**What is difference in get text method of select class and alert class**

in dropdown it is used to get text of elements.

In alert it is used to get text from alert

**What is basic authentic alert pop up how to deal?**

**Just add credentials inside the url this is answer. //https:/username:password@basicp**

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**What is inline frame?? Is separate independent html document (the document which is used to structure the web sites.) , Used to divide the web page into multiple sections. Each section is separate independent html document. Main page is one web page in which many frames/html documents embedded.**

**Why we need frames?? Client demand.**

**What are methods of frames?? Three- By id or name , by web element , by index**

**How you will handle alert in selenium?? Using alert interface.**

**How you will handle frames? By using switch to method.**

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**SELENIUM CLASS 07 DATE;21-02-2024**

**What is window handle?**

**How to Handling multiple windows in selenium?**

**What is purpose of handles?? To keep track of tabs and switch tabs**

**There are three types of waits in selenium**

1. Implicit wait -- global wait--- it tells to web driver wait for certain amount of time . 20 seconds usually set.
2. Explicit wait

3. Fluent wait

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**Class 08 Selenium**

What is explicit wait?? It tells the web driver to wait for certain condition to be met before throwing exception.

**What is difference in implicit and explicit waits????**

The only difference is the diff of condition.

Implicit wait not tell that this element is enabled or disable.

Explicit wait tell the state of element also , enabled ,disabled.

Implicit wait , waits for certain amount of time.

Explicit wait , waits for certain condition to be met , and given amount of time.

**1. flexibility**

Implicit wait is less flexible --

Explicit wait is more flexible - you can specify different wait conditions and timeouts for different elements or scenarios.

**2. Performance**; implicit wait take too much time less performance

Explicit wait more performance.

**the specified wait time is too long**

**which wait is best to use ?? explicit wait.**

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**//\*[text()='Welcome Syntax Technologies'] wild card is only applicable for x path.**

**Fluent wait?** it is used to tell web driver ,wait for certain condition as well as its frequency before throwing an exception.

**Fluent wait is global wait as implicit wait.**

What is polling mean in fluent wait. Its mean frequency, find the element after every 4 seconds. It is like a loop.

**What are web tables ?**

Web tables are web element which constructed by having rows and columns

**What are the types of web tables.**

1. Static web tables
2. Dynamic web tables

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**Class 09 Selenium**

**What is Stale element reference exception?**

this error comes when your page is refreshed automatically or the element locator is no found correct.

It is worst error in life of automation engineer. How to handle this error.

Please refresh you page.

Fine locator correctly on DOM.

**What is pagination??** Pagination in Selenium is navigating through multiple pages of a website.

Pagination breaks a big list into smaller sections, making it easier to read. It's like splitting a long story into shorter chapters for better understanding.

**Boolean flag=true; is only used in pagination with while loops.**

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**What is Calander??**

**Calendar is a web element on web page.**

**Types of Calander?**

1. input field

2. dropdown

3. pop up

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**CLASS 10 SELENIUM**

**What is take screenshot in selenium??**

Screen shot is an interface in selenium which is used to take the screen short of current web page.

**Why is screen shot is important??**

**For proof, for documentation, for capture failure, for record.**

In Selenium, take Screenshot is a method used to capture a screenshot of the current state of the web browser window.

**What is File ??** in screenshot file is a class in selenium which is used to create, store, delete, rename, the folder or file.

**What is File Utils???** File Utils is a utility class provided by the Apache Commons IO library.

**File Utils** offers various static methods for common file operations, such as copying files, moving files, reading file and more.

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**What is actions class in selenium?**

Action-s class is used to interact with actions performed by keyboard and mouse.

Action-s class is used where click and send keys are not useful enough.

What are methods are operator in actions class ?

The method which we learnt in class are

1. Right click
2. Double click
3. Perform
4. Build
5. Pick and hold
6. Drop

**actions.moveToElement(elementToHoverOver).perform();** is used to perform a mouse hover action on the specified web element. Perform mean execute the action.

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**What is java scrip executor?**

It is interface provided by selenium.

It is a library present in selenium, it is used when WebDriver’s own methods are not working.

Java script is an interface it has many different methods.

**When we will use java script library?**

it is used when WebDriver’s own methods are not working

**methods of java script executor;**

1. Click
2. Scroll the page
3. Refresh the page
4. Open a new tab
5. Highlight the element -- this is useful for take screen shot
6. Scroll the element

**Java script executor give two methods**

1. Execute script
2. Execute Async script

We will study only first one.

**What is page factory and without page factory??**

Page factory is a class in selenium, both are approaches how to initialize web element.

**Why we do need page factory??**

Reduce the duplication

Easy to read the code

Clean code.

Both are approaches in selenium how to implement the page object model POM.

Main difference between them is how the elements on web page are initialized and accessed.

* Page Factory approach uses annotations (**@FindBy**) to declare WebElements, and these elements are initialized using **initElements()** method of PageFactory class.
* Non-Page Factory approach initializes elements using **driver.findElement()** method directly within the Page Object class without any annotations.