

## Selenium Questions.

1. what is selenium? what are the different selenium Components? explain about selenium webdriver?

Selenium is an automation testing tool used to test web based application. Selenium is not a single tool but a suite of tools. There are four components of selenium - selenium IDE, RC, webdriver and grid. last two being the most famous one.

2. How does selenium Communicate with the browsers

Data Communication - To communicate between Server and Client (browser), selenium web driver uses JSON. JSON wire Protocol is a REST API that transforms the information between HTTP servers. Each Browser driver has its own HTTP server.

3. what are the locators available to find an element using Selenium?

- \* By CSS ID : find\_element\_by\_id
- \* By CSS class name : find\_element\_by\_class\_name
- \* By name attribute : find\_element\_by\_name
- \* By DOM structure or XPath : find\_element\_by\_xpath
- \* By link text : find\_element\_by\_link\_text
- \* By Partial link text : find\_element\_by\_partial\_link\_text.

8 locators :-

id, name, className, tagName,  
linkText, PartialLinkText, CSS selector &  
XPath

4. Why Id is preferable than XPath?

ID is considered as unique key so there cannot be more than 1 elements for same ID while XPath is created using relative path / position of elements so there can be cases when we can get 2 or more elements for same XPath.

5. How to select value in dropdown?

SelectByVisibleText (String args)

SelectByIndex (String args)

This method takes the index of the option to select in the dropdown

Syntax - Select s = new Select

edriver.findElement(By.id("{{Id Expr}}"));

s. SelectByIndex (1);

SelectByValue (String args)

6. What is the difference between absolute Path and relative Path?

An absolute Path is defined as specifying the location of a file or directory from the root directory (/). In other words, we can say that an absolute path is a complete path from start of actual file system from / directory. Relative Path is defined as the path related to the present working directory.

7. How to verify if the given checkbox is checked or not (it is not taught but you can explore)

use `is selected()`

It returns in boolean value

Returns True if it is checked

Returns False if it is unchecked

8. Difference between `System.setProperty` and `webdriverManager`

System.setProperty:

It is used to configure the browser driver path.

The Selenium client library communicates with the ChromeDriver via the JSON wire protocol.

The Chrome browser driver acts like a link between the selenium implementation code and the chrome browser.

WebdriverManager:

webdriverManager automates the browser setup in the selenium code.

By default, it downloads the latest version of the browser binary and also the binary for the appropriate platform.

We have to add the dependency for webdrivermanager in case the code below to maven or gradle environment.

9. write the syntax for Preceding & following X-paths?

Xpath:

// label [text() = 'Deepika'] // following - sibling

Input.

Preceding Xpath:

// input [text() = 'Deepika'] // preceding - sibling

:: label.

10. How to get an attribute value using Selenium webdriver?

To get the attribute value using Selenium webdriver, we can use 'element.getAttribute(Attribute Name)'.

If we try to get the attribute value that doesn't exists for the tag, it will return null value.