

1. What is Selenium? What are different Selenium components? Explain about Selenium Webdriver

Selenium is an open source umbrella project for a range of tools and libraries aimed at supporting web browser automation

There are four components of Selenium They are Selenium IDE, RC, WebDriver and GRID

Selenium Webdriver is a platform independent since the same code can be used on different Operating systems

2. How does Selenium communicate with the web browsers?

Data Communication - To communicate between server and client selenium driver uses JSON. JSON wire protocol is a REST API that transfer information between HTTP servers.

3. What are the locators available to find a statement 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.

4. Why ID is preferable than X Path?

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

5. How to select value in dropdown?

Using the value property: The value of the selected element can be found by using the value property on the selected element that defines the list. This property returns a string representing the value attribute of the <option> element in the list

6. What is difference between Absolute Path and Relative Path?

Absolute Path

It points to a specific location in the file system irrespective of the current working directory

It is also referred to as full path or file path.

It refers to the location of a file or directory relative to root directory in linux

Relative Path

It points to the location of a directory using current as reference

It is also referred to as non absolute path.

It refers to the location of a file or directory relative to current directory

9. Write a syntax for preceding and following X paths

XPath : //input[@id = 'u-o-2']//preceding::input.

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

The `getAttribute()` method helps to get the value of any attribute of a web element which is returned as a string. If an attribute has Boolean Value the method returns either `True` or `Null`.