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

Selenium is a opensource testing automated framework; which is used to validate the web Application from different browsers and platforms.

The selenium components are:

\*Selenium IDE(Integrated development environment)

\*Selenium RC

\*Selenium Web Driver

\*Selenium grid

Selenium Web Driver is a browser automation framework. It works with open source web applications. It operates by the commands by sending those command to the browser and interact with the application.

1. How does Selenium communicate with the Web browsers?

\*To communicate between browser and clients , selenium webdriver uesu JSON.

\*JSON wire protocol is a REST API that transfer the information between the http servers.

\*Each browser has its own HTTP server.

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

Id; name; class Name; link-text; partial link-text; tag name; CSS selector; X-path.

4. Why ID is preferable than X-Path?

Some times two more elements has same X-path so we prefer Id.

Element has a unique id so we select Id is preferable.

5.How to select value in dropdown?

Create a Select class and create object for the class

Now use the object and select by

Select by index();

Select by value();

Select by visible text();

6) What is the difference between Absolute Path and Relative Path?

\*Absolute path contain the full path of the element from top to end.

\*Relative path starting simply by referencing the element you want and go from the particular location.

7) How to verify if the given check box is checked or not (it is not taught but you can explore) Try here: <http://leafground.com/pages/checkbox.html>

We can check by the is. selected(); method.

8)Difference between System. Set Property and Web Driver Manager

System.setproperty : this is used to download browser and set the path where the browser exists and property value in it.

WebDrivermanager : this is simply add the dependencies in pom.xml file in your project it can download and set the path automatically by using this method.

9) Write the syntax for preceding and following x-paths.

Following X-path

//tagname[x-path]/following::tagname[xpath];

Preceding X-path

//tagname[X-path]/Preceding-sibling::tagname[x-path];

10) How to get an attribute value using Selenium WebDriver?

By using Get Attribute() method we can get the value of the web element. Which will return as a string if it has Boolean value it will return true or false if there will be no value it will return null.