SELENIUM INTERVIEW QUESTIONS

1. Define Selenium:

Selenium is a free open source automated testing suite for web applications across different browsers and platform.

1. What are the different Selenium components?
   * *Selenium Grid*
   * *Selenium IDE (Integrated Development Environment)*
   * *Selenium WebDriver*
   * *Selenium RC (Remote Control)*
2. What is the difference between Webdriver and RC?

Selenium-WebDriver makes direct calls to the browser using each browser’s native support for automation. How these direct calls are made, and the features they support depends on the browser you are using.

Selenium-RC worked the same way for each supported browser. It ‘injected’ javascript functions into the browser when the browser was loaded and then used its javascript to drive the AUT within the browser. WebDriver does not use this technique. Again, it drives the browser directly using the browser’s built in support for automation.

1. Why should Selenium be selected as a test tool?

* Selenium is pure open source, freeware and portable tool.
* Selenium supports variety of languages that include Java, Perl, Python, C#, Ruby, Groovy, Java Script, and VB Script. etc.
* Selenium supports many operating systems like Windows, Macintosh, Linux, Unix etc.
* Selenium supports many browsers like Internet explorer, Chrome, Firefox, Opera, Safari etc.
* Selenium can be integrated with ANT or Maven kind of framework for source code compilation.
* Selenium can be integrated with TestNG testing framework for testing our applications and generating reports.
* Selenium can be integrated with Jenkins or Hudson for continuous integration.
* Selenium can be integrated with other open source tools for supporting other features.
* Selenium can be used for Android, IPhone, Blackberry etc. based application testing.
* Selenium supports very less CPU and RAM consumption for script execution.
* Selenium comes with different component to provide support to its parent which is Selenium IDE, Selenium Grid and Selenium Remote Control (RC).
* Biggest advantage is selenium can absorb easily to write test cases.

1. Are there any Cons of using Selenium?

* **No reliable Technical Support from anybody.**
* **It supports Web based applications only.**
* **Difficult to use, takes more time to create Test cases.**
* **Difficult to Setup Test Environment when it compares to Vendor Tools like UFT, RFT, SilkTest etc…**
* **Limited support for Image Testing.**
* **New features may not work properly.**
* **No Test Tool integration for Test Management.**
* **No Built-in Reporting facility.**

1. What are the limitations of Selenium?

* Selenium support only web-based applications, it doesn’t support any windows based applications.
* Using Selenium tool alone mobile applications cannot be tested, with use of Appium we can achieve it.
* The Windows-based popup cannot be tested using Selenium alone we need to use AutoIT to handle the windows based popups.
* Selenium doesn’t have inbuilt reporting capability so JUnit/ TestNG need to use.
* Limited support for image testing.
* Selenium IDE supports only Firefox browser.
* Selenium doesn’t have built-in object repository.
* Selenium is an open source so no reliable support is available.

1. What do we mean by Selenium 1 and Selenium 2?

Selenium 1 = Selenium Remote Control. Selenium 2 = Selenium Webdriver, which combines elements of Selenium 1 and Webdriver.

1. How do I launch the browser using WebDriver?

It depends on browser and [programming language](https://www.seleniumhq.org/about/platforms.jsp), for example here are instructions for [Java](https://seleniumhq.github.io/selenium/docs/api/java/)and [Chrome](https://www.google.com/chrome/)

* Download Chrome
* Download matching version of [ChromeDriver](http://chromedriver.chromium.org/" \t "_blank)and unpack it somewhere to your local hard drive
* Now you should be able to create a [ChromeDriver](https://seleniumhq.github.io/selenium/docs/api/java/org/openqa/selenium/chrome/ChromeDriver.html" \t "_blank) class instance which will automatically kick off Chrome browser orchestrated by the WebDriver:

1. System.setProperty("webdriver.chrome.driver", "c:/path/to/chromedriver.exe");
2. ChromeDriver driver = new ChromeDriver();
3. driver.get("https://example.com");
4. System.out.println(driver.getTitle());
5. driver.quit()
6. Can captcha be automated?

a CAPTCHA cannot be automated: Otherwise, it could not tell computers and humans apart and hence fails to be a CAPTCHA.

1. What is Automation Testing?

[Automation Testing](https://www.lambdatest.com/selenium-automation?utm_campaign=JA-071119-2&utm_medium=Ans&utm_source=Quora&utm_term=Junaid) means using an automation tool to execute your test case suite.

1. What are the benefits of Automation Testing?  
     
    the cost and time limitations.