

7. What is in the Selenium tool set?

- Selenium IDE → implemented as a Chrome and Firefox extension, and allows you to record, edit, and debug tests.
- Selenium RC → to write automated web application UI tests in any programming language
- Selenium WebDriver → execute your tests against different browsers
- Selenium GRID → run your tests on different machines against different browsers in parallel.

8. What version of Selenium do you use right now?

- JDK (JAVA) - 1.8 → I like it because of → Lambda exp. and, Try catch error handling you may add multiple catches.
- IntelliJ - 2018.03.04
- Selenium - 3.141.59
- TestNG - 6.14.3
- Cucumber – 4.2.6
- Maven - 3.6.0
- GIT - 2.17.2

9. Implicit Wait vs Explicit Wait?

- **Implicit wait** is a wait which waits for a specified time while locating an element before throwing "NoSuchElementException". As by default selenium tries to find elements immediately without any wait. So, it is good to use implicit wait. This wait applied to all elements of the current driver instance.
- **Explicit wait** is a wait which is applied to a particular webelement until the ExpectedCondition specified is met.
- Implicit wait is simply; if condition is met before the timeout, it will continue to next step, if condition is not met within timeout throw "No Such Element" exception.
- Explicit wait sometimes we need to wait for a certain event/condition such as element is visible, clickable, enabled....

```
driver.manage().timeouts().implicitlyWait(5, TimeUnit.SECONDS);
WebDriverWait wait = new WebDriverWait (driver, 5);
wait.until (ExpectedConditions.visibilityOf(element));
```

10. What is fluentWait?

- Let's say you have an element which sometime appears in just 1 second and some time it takes minutes to appear. In that case it is better to use fluent wait, as this will try to find element again and again until it find it or until the final timer runs out. Example is AJAX or JQuery
- Subtype of explicit wait but you can override the conditions

```
Wait<WebDriver>wait=new
FluentWait<WebDriver>(driver).withTimeout(5,timeUnit.seconds).pollingEvery(100,timeunit.
milliseconds).ignoring(NoSuchElementException.class);
```

11. What are various ways of locating an element in Selenium?

- Selenium Locators → Id & name
- In selenium locator is a means of finding an element in the html :
- Id, name, className, xpath, css, linkText, partialLinkText, tagName

12. Why I cannot find element?

- Locator changed
- There is an iframe
- Waiting time:: page is loading slowly or Element is dynamic:: locator
- Page is not fully loaded/opened
- Page changes and that element does not exist anymore