

SELENIUM

1. What is Selenium and what is composed of?

- Selenium is a suite of tools for automated web testing. It is composed of;
 - Selenium IDE(Integrated Development Environment); a Firefox plugin that works for recording and playing back.
 - Selenium RC(Remote Control) (1.0) ; is a test tool and is used to work on JS to automate the web application. (2004)
 - WebDriver (2.0); is a web automation framework and allows you to execute your tests in different browsers. (2011)
 - Selenium Grid; allows tests to run in parallel across multiple machines.

2. What are the advantages of Selenium?

- Selenium is open source and free to use without any licensing cost
- It supports multiple languages like Java, Ruby, Python, C#...
- It supports multi-browser testing
- It has a good amount of resources and helping community
- It supports many operating systems like Windows, Mac, Linux ...
- Interact with the web application

3. What are the disadvantages of Selenium?

- Selenium supports only web-based applications, does not support windows-based application
- No built-in reporting tool, it needs third party tools for report generation activity
- Cannot work with graphics, captchas, barcodes, shapes
- It does not support file upload facility.
- Hard to master, requires developer level knowledge
- Hard to write good locators
- Hard to synchronize

4. What are the limitations of Selenium?

- We cannot test desktop application
- We cannot test web services
- Ewe have to use external libraries and tools for performing tasks like testing framework (TestNG, JUnit), reading from external files (Apache POI for excel)
- Automating Captcha is not possible using Selenium
- It does not support file upload facility.

5. What types of testing you automate with Selenium?

- functional tests (positive/negative, UI)
- smoke tests
- regression tests
- integration tests
- end to end testing
- data driven

6. What we don't do with selenium?

- Performance, load, stress testing, manual ad hoc testing, (These tests are done by experts trained in these tools)
- Pure database testing (if we only test the DB itself),
- Unit tests..., look and feel based testing (color, shapes, etc.),
- static testing