P Rama Lakshmi

BC\_89

Emp:6141

Selenium VS QTP

Selenium:

Selenium is a free (open-source) automated testing framework used to validate web applications across different browsers and platforms. You can use multiple programming languages like Java, C#, Python etc to create Selenium Test Scripts. Testing done using the Selenium testing tool is usually referred to as Selenium Testing.

QTP:

QTP is an automated functional[Testing](https://www.guru99.com/software-testing.html)tool that helps testers to execute automated tests in order to identify any errors, defects or gaps in contrary to the expected results of the application under test. It was designed by Mercury Interactive and later on acquired by HP and now MicroFocus. Full form of QTP is QuickTest Professional while UFT means Unified Functional Testing.

| **Selenium** | **QTP** |
| --- | --- |
| Selenium is an Open source tool hence no license required. | License is required. |
| There is a Low resource consumption during test scripts execution. | In QTP there is a High resource consumption. |
| There is a customer support in Selenium that is dedicated HP support. | There is a customer support in QTP that is selenium community forums |
| There is relyment for parameterization on any one of the supported programming language. | For parameterization in QTP, built-in tools are available. |
| Some supported environments in Selenium are Android, iOS, Windows, Linux, Mac, Solaris. | QTP supports only Windows. |
| It supports automation for web based applications | There is a support for test on both web and desktop based applications. |
| Java, C#, Ruby, Python, Perl, PHP and JavaScript are the programming languages supported in selenium. | QTP supports VB Script. |
| For generating the reports of test, selenium rely on external tool. | There is built-in test report generation within the tool QTP. |
| Object Repository is absent in selenium. | There is a build-in object repository in QTP. |
| Recovery Scenario is absent in selenium. | There is a build-in recovery scenario in QTP. |
| Browsers supported by selenium are Google Chrome, Mozilla Firefox, Internet Explorer, Edge, Opera, Safari, etc. | Browser supported in QTP are specific versions of Google Chrome, Mozilla Firefox and Internet Explorer. |
| Selenium is less user friendly. | QTP is user friendly. |

What is Sikuli ?

[Sikuli](http://www.sikuli.org/" \t "https://www.softwaretestingmaterial.com/sikuli-guide-integrate-sikuli-with-selenium/_blank) is a Graphical User Interface Automation Tool. Using Sikuli Automation tool we could automate whatever we see on the screen. It basically uses image recognition technology to identify and control GUI elements. We all know that using Selenium we cant automate windows objects. Integrating Sikuli with Selenium allows us to overcome this issue. Using Sikuli with Selenium, we could automate windows objects. Using Sikuli we could automate both Web and Windows based applications. Most of us using [AutoIT](https://www.softwaretestingmaterial.com/upload-file-using-autoit/) to upload or download files in Selenium. Using Sikuli you could do it very easily. We could do flash testing using Selenium. We could not identify the element locators of flash objects. We could use sikuli tool to automate flash objects.

**Mechanism of Sikuli with Selenium:**

The object, if we want to automate, should be captured and placed in a specific folder and pass the path of the appropriate image into our Selenium script. At the time of execution, if the image which we passed is matched with the image on the screen then the desired action will be performed on that object.

**Advantages of Sikuli Graphical User Interface Tool:**

* It is an open source tool for automation
* Easily to integrate sikuli with selenium
* Can automate Desktop / Windows application
* Easily automate Flash objects – Flash Testing
* It can be used on any platform such as Windows/Linux/Mac/Mobile
* Due to its image recognition technique, we could automate even though there is no access to the code. It allows us to automate anything we see on the screen.