# 1. What is Automation Testing?

- Automation Testing is a software testing technique that performs using special automated testing software tools to execute a test case suite. On the contrary, Manual Testing is performed by a human sitting in front of a computer carefully executing the test steps.
- The automation testing software can also enter test data into the System Under Test, compare expected and actual results and generate detailed test reports. Software Test Automation demands considerable investments of money and resources.
- Successive development cycles will require execution of same test suite repeatedly.
   Using a test automation tool, it's possible to record this test suite and re-play it as
   required. Once the test suite is automated, no human intervention is required. This
   improved ROI of Test Automation. The goal of Automation is to reduce the number of
   test cases to be run manually and not to eliminate Manual testing altogether.

# 2. Which Are The Browsers Supported By Selenium Ide?

- Latest version of Selenium IDE runs on the Chrome and Firefox Browsers of the below mentioned Operating Systems:
- > Microsoft Windows
- > Mac OS X
- > Linux
- > Solaris
- > Other operating systems which support Firefox and Chrome Browsers



# 3. What are the benefits of Automation Testing?

### 1. Enhanced Results

 Since automation testing saves plenty of time even when complex and enormous systems are taken into consideration. This allows testing to be carried out repeatedly, delivering better and faster results with significantly lesser efforts and reduced time.

## 2. Swifter Feedback system

Automation testing is extremely crucial during the validation phase of any software project. It
significantly enhances communication among the developers, designers, and product merchants,
and provides space for the potential glitches to be rectified immediately thus enhancing the
efficiency of the development team.

#### 3. Brand Enhancement

• The effectiveness of testing is always dependent on the quality of test data that is being used. Testing is often performed on the copies of live databases as creating relevant and quality test data takes copious amounts of time. Automation solutions allow you to re-use your data time and again. This saves a lot of costs from project handling and project maintenance perspective.

#### 4. Cost-effective

• Even though the initial investment needed for automation testing is on the higher end, it saves a lot of money for the company in the longer run. It is predominantly due to the reduction in the amount of time required to run the tests. It also contributes a much higher quality of work as there are no chances of neglect or human error. This decreases the necessity of fixing glitches in the post-release phase, thus saving huge amounts of project costs.

# 5. Efficiency Testing

Testing is one of the most pivotal parts of the entire application development cycle. The most
attractive part of the automation testing is that it can be left virtually unattended. This leaves a
lot of room for the results to be monitored towards the end of the process. This allows for
increasing the overall efficiency of the application.

# 6. Increase in Coverage Area

• Through the use of automation testing, more tests can be allotted pertaining to any application.

This leads to higher testing coverage and a reduction in software anomalies. It also allows room

for testing more features and complex applications. However, in order to the same thing in a manual testing scenario would require a massive team along with heavy time constraints.

# 7. Detailed Testing

All testers tend to have different testing approaches with different focus areas as per their
exposure and level of expertise. With the help of automation, there is an equal focus on all areas
of testing, thus assuring the best possible quality of the end product with greater emphasis on
each aspect of the product. Automation testing is known for its atom level approach of testing
due to which it is considered error-free.

### 8. Reusability

Test Automation is repetitive in nature due to the nature of its test automation cases. In addition
to an easy setup configuration, it gives the software developers an opportunity to assess the
program's reaction. Automated test cases are totally reusable and hence can be utilized for testing
any aspect of the code as per significance and through a plethora of different approaches.

#### 9. Earlier Detection of Defects

Automation testing documents the software defects and hence making it considerably easier for
the testing teams. This also makes it relatively easier for the development and support team to
together contemplate the defects and give a faster output. The overall development speed of the
project is increased while ensuring correct functionality across relevant areas. The earlier any
defect is identified, the better and cost-efficient it is to solve and deploy it.

### 10. Time to market

Test automation helps significantly in reducing the time-to-market launch of an application.
 Automation testing allows constant and regular execution of test cases. Post automation the test library execution is extremely swift and runs longer.

# 4. What are the advantages of Selenium?

- **Antioxidant properties** Selenium is a powerful antioxidant, which means it helps protect cells from damage caused by harmful molecules called free radicals.
- **Boosts the immune system** Selenium helps boost the immune system, making it easier for the body to fight off infections and diseases.
- **Promotes healthy thyroid function** Selenium plays an important role in the proper functioning of the thyroid gland, which helps regulate metabolism.
- May reduce the risk of certain cancers Some studies have shown that selenium may help reduce the risk of certain types of cancer, such as prostate and lung cancer.
- May improve heart health Selenium may also help improve heart health by reducing inflammation and preventing the formation of blood clots.

# 5. Why testers should opt for Selenium and not QTP?

• Why testers should opt for Selenium and not QTP? **Selenium is more popular** than QTP as Selenium supports Firefox, IE, Opera, Safari on operating systems like Windows, Mac, Linux etc. however QTP is limited to Internet Explorer on Windows.