**Automation frequently asked questions**

**1) What is Automation testing?**

Automation Testing uses an automation tool to execute test cases. The main goal of Automation Testing is to reduce the number of test cases to be run manually and not eliminate Manual Testing.

**2) When will you automate a test?**

Automation is preferred in the following cases

* Repetitive Tasks.
* [Regression Testing](https://www.guru99.com/regression-testing.html)
* Smoke and Sanity Tests.
* Test with multiple data sets.

**3) When will you not Automate testing?**

One should not automate in the following cases

* When the Application Under Test changes frequently
* One-time test cases
* [Adhoc – Random Testing](https://www.guru99.com/adhoc-testing.html)
* [Exploratory Testing](https://www.guru99.com/exploratory-testing.html)
* Usability tests that generally need manual intervention to check the test results
* Test cases with detailed setup requirements to be done before each execution
* Test cases that return unpredicted test results
* Exclude unplanned test case

**4) What are the steps involved in the Automation Process?**

In the automation process, the steps involved are

* Selecting the Test tool
* Define the scope of automation
* Planning, design, and development
* Test execution
* Maintenance

**5) What are the points covered while planning the phase of automation?**

During the planning phase of automation, things that must be taken into concern are:

* Selection of the “right” [Automation tool](https://www.guru99.com/automated-testing-tools.html)
* Selection Automation Framework, if any.
* List of in-scope and out-of-scope items for automation.
* Test Environment Setup.
* Preparing Gantt Chart of Project timelines for test script development & execution.
* Identify Test Deliverables.

**6) In what condition you can’t use automation testing for the Agile method?**

Automation testing is not helpful for agile methods in the following conditions:

* When user stories are constantly changing
* When an exhaustive level of documentation is required in Agile.
* Only suitable for regression tests during agile testing, like continuous integration.

### 7) What is a test script?

A test script is a code to perform a set of instructions on an application. It is used to verify whether the application is functioning as per the software requirements.

When you run your script, it gives the test results as a pass or fails, which is determined by whether the application works as per the expectations

**8) How to select a good test automation tool?**

* Wide Test Environment support
* Easy to use
* Good debugging facility
* Robust object identification
* Record and Playback
* Supports common programming languages for test script creation, for example, Java
* Image testing abilities
* Testing of database
* Parameterization
* Support multiple automation frameworks
* Type of support is available for the tools like documentation, tutorials, training, etc
* Cost and budget
* Good reporting system

**9) Can you tell me some good coding practices while automation?**

Here are good automation practices:

* Add appropriate comments to explain that coding part.
* You should identify the reusable methods and write them in a separate file.
* Must follow the language-specific coding conventions.
* Store the test data in a separate file.
* Run your scripts regularly.

### 12) What version control systems do you use?

We use GitHub. Version control helps you to track code changes. It controls the test script source code with a recorded history of changes to simplify the modification process. You may also revert to previous code versions if you make a mistake.

### 13) What are XPath Axes? Name some of them.

XPath is a syntax that manipulates XML (Extensible Markup Language) data. They help to locate nodes related to those on the tree. Some important XPath Axes are ancestor, child, namespace, parent, etc.

### 14) How can you speed up an auto test suite?

Applications that require UI testing that interacts with multiple elements can slow down the testing process. It’s better to create a simple test script that speeds up test execution.

### 15) Is documentation necessary in Automation Testing?

Documentation plays a vital role in Test Automation. You should document all the methods and procedures to ensure their repeatability. Test specifications, designs, code changes, test cases, automation plans, bug reports

**16) What types of frameworks are used in software automation testing?**

Four types of frameworks used are

* Data-driven automation framework
* Keyword-driven automation framework
* Modular automation framework
* Hybrid automation framework

### 17) Is it possible to achieve 100% automation?

No, it is not possible to automate everything. Achieving 100% automation is difficult as there are some scenarios where a registration page has a captcha or some test cases we don’t execute often. Moreover, automating these test cases will not add value to the automation or bring positive ROI.

### 18) What is the average number of test cases you have automated per day?

The answer depends on the length and complexity of the test scenario. Generally, a QA tester can automate 2-4 test scenarios daily when the complexity is limited. However, sometimes it might reduce to 1-2 when the complexity is high.

**20) What are the most popular tools for automation testing?**

The most popular test tool for automation testing are:

* [Selenium](https://www.guru99.com/selenium-tutorial.html)
* [UFT](https://www.guru99.com/quick-test-professional-qtp-tutorial.html).
* Rational Robot.

**21) How can you measure the success of automation testing?**

Following criteria can map the success of automation testing:

* Defect Detection Ratio
* Automation execution time and time savings to release the product
* Reduction in Labour & other costs

**22) Can you list out some disadvantages of manual testing?**

* [Manual testing](https://www.guru99.com/manual-testing.html) requires more time and more resources.
* Inaccuracy
* Executing the same test case repeatedly is error-prone and tedious.
* It is impractical to do manual testing on very large and time-bound projects.

**23) What are the differences between open-source tools, vendor tools, & in-house tools in automation testing?**

Here are the differences between all:

* **Open-Source Tools:** They are free tools with source code available on the internet. Example: Selenium
* **Vendor Tools:** These testing tools are developed by companies, and you need to purchase their licenses. Example: Microfocus UFT.
* **In-house Tools:** It is built by companies for their use.

**24) What are the Prerequisites of Automation Testing?**

A few important pre-requisites of Automation Testing are:

* A stable build
* Functionalities to be tested
* Test cases for automated Testing

### 25) Can you do automation without a framework?

Frameworks are guidelines and not mandatory to create and execute automation scripts. So, yes, we can automate without a framework. Enhancing and maintaining test scripts would be easy if we created and followed a framework.

**26) Tell me what you know about Selenium**

Selenium is a free (open source) test automation suite. It is used to automate Web and Mobile environments. It consists of the following.

* Selenium IDE (Browser Addon–Record and Playback Tool)
* Selenium WebDriver
* Selenium Grid (Distributed Testing)
* Selenium supports scripting in languages like Java, C#, Python, Ruby, PHP, Perl, and JavaScript.

**30) What are the attributes of a good automation framework?**

Here are some important attributes of a good automation framework:

* **Modular:**It is a framework that should be adaptable to change. So that testers should be able to modify the scripts as per the environment.
* **Reusable:**It should be reusable so that methods or utilities should be written in a common file accessible to all the scripts.
* **Consistent:**It should be written in a consistent format.
* **Independent:**The automation scripts should be written in such a way that they are independent of each other.
* **Integration:**Automation Framework should be developed in such a way that it is easy to integrate with other applications.

### 31) What is Cross-Browser Testing?

It is a subset of browser automation testing that helps you ensure that the online application operates correctly across different browsers. Google Chrome, Mozilla Firefox, Microsoft Edge, Safari, etc.

**32) Which Testing can be done using the Selenium Framework?**

You can use a Selenium framework for the following testing:

* Load testing of web applications.
* Regression testing of web applications.
* Functional testing of web applications.

### 33) Is Automation testing white box testing or black box testing?

Automation testing is primarily black box testing.

**34) What keyword is used to fetch the URL of the current page in Selenium?**

Selenium WebDriver can help you find the current URL of a page with the getcurrentURL(). This method will find the URL of the open applications and result in a string.

**35) Where will you maintain information like URL, login, and password?**

URL, login, and password are important information used very often and change frequently. They should always be maintained in a separate file. If not done, then the automation tester must change it in every file with its reference.

### 39) What is Cucumber?

[Cucumber](https://www.guru99.com/cucumber-tutorials.html) is an open-source (BDE) behavior-driven development tool. It is used tool for web-based application automation testing and supports languages like Java, Ruby, Ruby, Scala, Groovy, etc. Cucumber reads executable specifications written in plain text and tests the application under test for those specifications.

### 11. What does Maven's dependency management entail?

The successful completion of a project depends on effective dependency management. A product typically depends on a wide variety of parts, programmes, and outside libraries that are developed by numerous teams on their own schedules. You can control the interconnections for reproducible builds using Maven. Dependencies are crucial for automation testers because a slow service could indeed destroy testability and the efficient flow of work. Int.

### 15. What benefits does the Page Object Model offer?

The Page Object Model (POM) in Selenium creates a repository where class files are kept. Development teams can work much more efficiently with code because it allows you to store artifacts and web elements. POM, in particular, permits changes at the method level, improving maintenance and code reuse.

* **Tell me something about yourself.**
* **Define automation testing in your own words.**
* **What made you apply for this position?**
* **What is the difference between manual testing and automation testing?**
* **Do you think manual testing is becoming obsolete?**
* **How would you explain CAPTCHA to a potential client?**
* **What value can you bring to our company?**
* **What is a bug in testing?**
* **Explain the definition of framework.**
* **When is automation testing useful?**
* **Where do you see yourself five years from now?**
* **What is the ideal software to test?**
* **What do you dislike about automation testing?**
* **How do you rate yourself as an automation tester on a scale of one to 10?**
* **Tell us about your strengths and weaknesses in automation testing.**
* **Do you have any questions to ask us?**