## **AUTOMATION TEST REPORT:**

Test Automation Report is a blueprint that shows the overall results of your test execution. It shows how many tests were executed, the details about the tests that were executed, the steps inside those tests which were executed, the overall execution time, the individual test execution time, steps that passed, failed, skipped, or got broken, and even show the reason behind any failed or skipped Test Case.

### **Importance:**

Test Automation Reports effectively analyze test results through their different parameters. This report can help in multiple ways, by detecting the bugs earlier in the cycle; they also make the analysis easier as they have detailed information about failure reasons, errors, etc. This helps determine how good or bad of a shape the project is in and how aligned it is with the business requirements.

### Key Features of a Good Test Automation Report

Let's check out some of the key features of a good Test Automation Report that will help you decide on the best suitable Report for our framework.

### • Accessibility

It shouldn't be the case that the report is only accessible by the person who has run the test. Usually, this is the case if the tests are run locally. This can decrease the effectiveness of the test automation report. No matter which Reporting tool is being leveraged in the framework, the Test Automation Reports should be easily accessible throughout the entire team or rather an organization. Continuous integration systems like Jenkins can easily help in achieving accessibility of the test reports.

#### • Readability

The Test Automation Reports should be detailed enough, and by looking at them, one should easily understand the test coverage, overall pass and fail percentage, any bug or test case associated with those cases, and the failure reason, if any. In other words, they should be simple as well as detailed and comprehensive.

## • Trend Information

The Test Automation Reports must have a mechanism for analyzing the trends between different runs and ultimately show a trends chart to the end user. This can be very useful for Product Owners and Managers to analyze the effectiveness of the test automation framework. Additionally, this trend chart can help the QA team members to analyze the health of the builds that were promoted to the test environments.

#### Key Metrics of a Good Automation Test Report

Below are some of the metrics that a QA must always look for in any Automation Test Report:

- Total Number of Test Cases
- Overall Test Result(Overall pass and fail percentage)

- Individual Test Result (Passed/Failed status of every test case)
- List of all test cases
- Overall duration
- Individual test duration
- Environment Name
- Build Name

## TestNG

TestNG is one of the most widely used unit testing frameworks, which is inspired by JUnit and NUnit. It comes with its own library with a default reporting feature and can be used to generate test reports stored in a designated folder.

It also provides an option to generate detailed reports along with its basic test reports. In TestNG, **emailable-report.html** is the file or rather the report, is generated without any manual intervention and carries all the details along with information on passed tests, failed tests, errors, total no of tests executed, the time duration, etc.

Test	# Passed	# Skipped	# Failed	Time (ms)		Included Groups		Excluded Groups
				Su	ite			
Test	2	0	0	27,961				
Class		Method	Start	Start		(ms)		
		Sui	ite					
		Test —	passed					
com t	est DemoA		1471859670	194	13509			
com.t	est.DemoB	run	1471859655	754	14438			
om.t	est.Demo/	\#run					back to s	ommary
om.t	est.Demol	B#run						

# Advantages of TestNG:

- It provides HTML reports.
- It is quite popular among Java developers and testers and has been widely accepted as a reliable reporting tool for Selenium.
- It comes default with the TestNG framework, so no additional integration with any other framework is required.

# Limitations of TestNG:

- It supports only Java
- It is only available with the TestNG framework.