## **TestNG Introduction**

TestNG is a testing framework inspired from JUnit and NUnit with more functionality added to make execution more efficient and powerful. It is an open source automated testing framework.

TestNG eliminates most of the limitations of the older framework and gives the developer the ability to write more flexible and powerful tests with help of easy annotations, grouping, sequencing & parameterizing.

## **Benefits of TestNG**

Major advantages of testing are:

- Logs can be generated
- Annotations make code efficient and easy to manage
- Ability to produce HTML Reports of execution
- Test cases can be Grouped & Prioritized
- Parallel testing is possible
- Data Parameterization is possible

## **Annotations in TestNG**

- @BeforeSuite: Method with this annotation will run before all tests in the test suite
- @AfterSuite: Method with this annotation will run after all tests in the test suite
- @BeforeTest: Method with this annotation will run before each and every test method with <test> tag in xml file
- **@AfterTest**: Method with this annotation will run after each and every test method with <test> tag in xml file
- @BeforeClass: Method with this annotation will run before first test method in current class
- @AfterClass: Method with this annotation will run after last test method in current class
- @BeforeMethod: Method with this annotation will run before each test method
- @AfterMethod: Method with this annotation will run after each test method
- @Test: The annotated method is a part of a test case.

## Benefits of using annotations

- 1. TestNG identifies the methods that it is interested in by looking up annotations. Hence method names are not restricted to any pattern or format.
- 2. We can pass additional parameters to annotations.
- 3. Annotations are strongly typed, so the compiler will flag any mistakes right away.
- 4. Test classes no longer need to extend anything (such as Test Case, for JUnit 3).