

TestNG Lecture 1: Introduction

What is TestNG?

TestNG (Test Next Generation) is a testing framework designed for Java that is inspired by JUnit and NUnit. It provides powerful features to design, execute, and manage test cases effectively in automation testing.

What is a Framework?

A framework, in general, is a structured platform that provides reusable functionalities and guidelines to develop and execute tests efficiently, reducing redundancy and improving test maintenance.

Why Use TestNG?

- Annotations for better control of test execution.
- Parallel execution of tests to improve efficiency.
- Grouping of test cases to execute related tests together.
- Flexible configuration using XML.
- Data-driven testing support with parameters and data providers.
- Reporting with detailed logs and test execution results.

Installing TestNG in a Maven Project

To use TestNG in a Maven project, add the following dependency to your pom.xml file:

```
<dependency>
  <groupId>org.testng</groupId>
  <artifactId>testng</artifactId>
  <version>7.11.0</version>
  <scope>test</scope>
</dependency>
```

Basic TestNG Example

```
import org.testng.annotations.Test;

public class SampleTest {

    @Test
    public void testMethod() {
        System.out.println("TestNG Test Executed Successfully");
    }
}
```

```
}
```

Next Steps

In the next lecture, we will cover TestNG annotations in detail and explore how they help in structuring test cases efficiently.