

Chapter 7.1:

Intro To Dependency Testing

Introduction

Dependency Testing is one of the main features that separate TestNG from all other Test Frameworks. After reading Next Generation Java Testing, I came across a section called Dependent Code and it mentioned some developers in the testing community are strongly opposed to any hint of dependencies in their test.

One of their arguments state as soon as Test Methods depend on other Test Methods, it becomes hard to run those methods in isolation. That argument was true until TestNG. Now, we are allowed to run Test Methods in isolation and part of a dependency. TestNG provides a way to clearly indicate those dependencies. Therefore, it has no problem considering the requirements for any Test Method we want to run in isolation.

Attributes are used to assist annotations with our testing. All 3 of these attributes can be placed in the Configuration Annotations and the Test Annotation and we are going to cover Introduction To Dependency Testing.

What Is Dependency Testing

What Is Dependency Testing? Dependency Testing is when 2 or more actions, 2 or more tasks, 2 or more functions in our Test Application depend on the order of their methods. For example, we must Sign In to the application before we can Sign Out of the application. Therefore, signing out depends on us first signing in. If we, reverse that order and execute, then the sign out method would fail.

We have seen a form of Dependency Testing in Chapter 3 with Annotations. The Test Methods depend on the Configuration Annotations. If a Configuration Annotation fail then the Test Methods would not pass. Here's an example of a Failed Configuration. Let's run.

We see 1 Configuration Failure and 1 Skip. The BeforeClass setUp Configuration Failed and the AfterClass tearDown Configuration was Skipped. Then we see the Test Methods. There are 3 Runs and 3 Skips. Zero Failures. The Test Methods were skipped because the setUp method Failed. At the core, that is Dependency Testing. It is Dependency Testing because the Test Methods were skipped and did not fail. You can get more information about Dependencies on TestNG website.
testng.org/doc/documentation-main.html

Dependencies and it takes you straight to that section. Next we will discuss the Depends On Methods Attribute which helps us with Dependency Testing.