



Testing Spring

Beginner to Guru

Introduction to Mockito



What is Mockito?

- Mockito is the most popular mocking framework for testing Java
- Mocks (aka Test Doubles) are alternate implementations of objects to replace real objects in tests
- Works well with Dependency Injection
- For the class under test, injected dependencies can be mocks





Types of Mocks (aka Test Doubles)

- **Dummy** - Object used just to get the code to compile
- **Fake** - An object that has an implementation, but not production ready
- **Stub** - An object with pre-defined answers to method calls
- **Mock** - An object with pre-defined answers to method calls, and has expectations of executions.
Can throw an exception if an unexpected invocation is detected
- **Spy** - In Mockito Spies are Mock like wrappers around the actual object





Important Terminology

- **Verify** - Used to verify number of times a mocked method has been called
- **Argument Matcher** - Matches arguments passed to Mocked Method & will allow or disallow
- **Argument Captor** - Captures arguments passed to a Mocked Method
 - Allows you to perform assertions of what was passed in to method





Mockito Annotations

Annotation	Description
@Mock	Used to create a mock
@Spy	Used to create a spy
@InjectMocks	Inject mocks / spys into a class under test
@Captor	Captures arguments to Mock



