

Unit Testing with Dependencies

Test Doubles

Fake:

Functional substitution for the real unit

Optimized for tests

Stub:

Return pre-defined data

Returned data is tailored for test needs

Mock:

Record interactions during test

Recorder interactions can be inspected

Test double types:

Fake

Stub

Mock

The Many Meanings of “Mock”

Mock can refer to:

Test double of type mock

Any test doubles in general

Test double implemented using “mocking framework”

Test Doubles Fundamentals

Test doubles:

Used to substitute external unit's dependencies in tests

Three main types: fake, stub and mock

Fake is a functional implementation optimized for tests

Stub return predefined data and can have programmable behavior

Mock records interactions with itself

Mock can refer to:

Test double of type mock

Any test doubles in general

Test double implemented using “mocking framework”

Static methods:

Hidden dependencies

Can't be substituted with test doubles

Singletons should be avoided at all costs