Mocking with Moq

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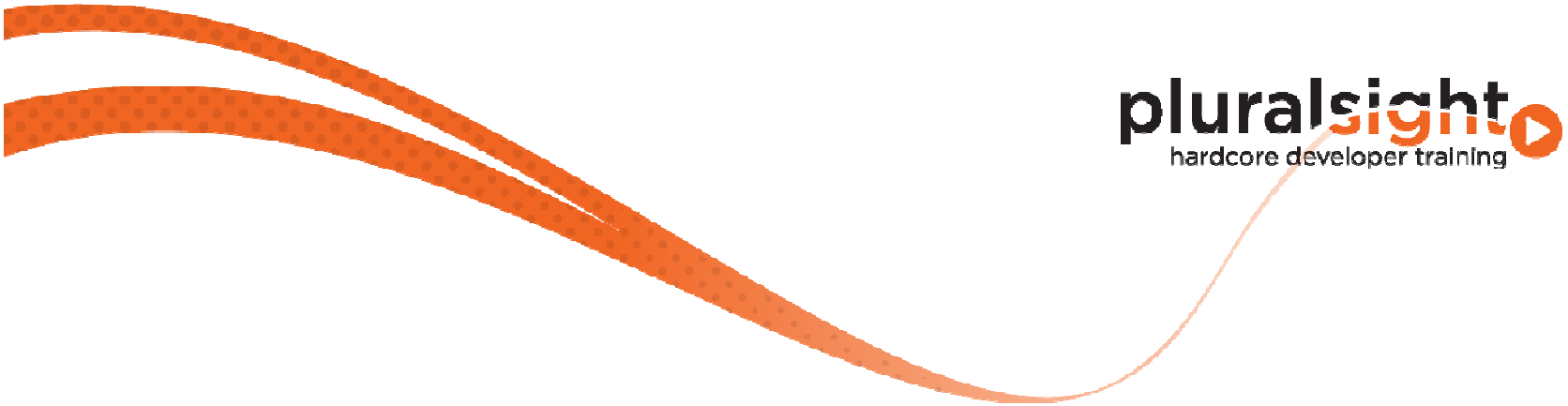
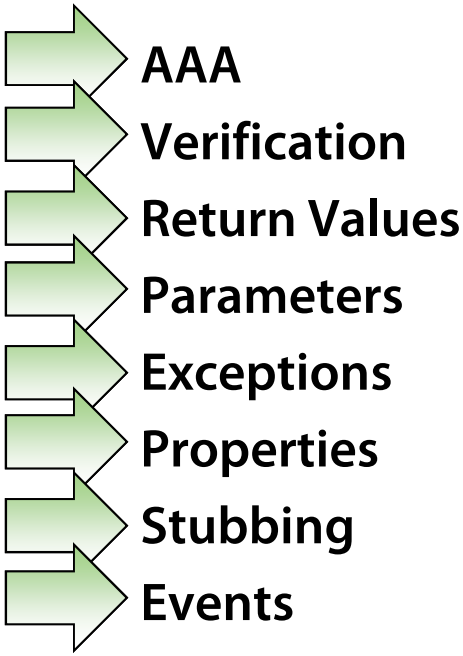


pluralsight
hardcore developer training

Outline


AAA
Verification
Return Values
Parameters
Exceptions
Properties
Stubbing
Events

Arrange, Act, Assert

Arrange

- Creating a mock object
- Pass the mock to the SUT

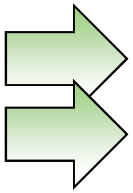
Act

- Execute the SUT

Assert

- Verify SUT's interaction with the mock object

Simple Verification



The Assert in the AAA syntax

Did the SUT work as expected?

- Did a method get called?
- How many times did it get called?

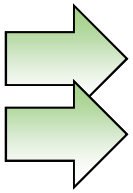
Return Values

- **Useful for control SUT execution flows**
- **Return values from**
  - Function calls
  - *out* parameters
  - *ref* parameters
- **Returning different values**

Arguments

- Verifying what value was passed
- Different behaviors for different method parameters
- Can be used to help control SUT execution flow

Exceptions



- Mock object throws when invoked
- Verifying SUT exception handling

Properties

- Verify “setter” calls
- Return values from “getter” calls
- Auto-mocking hierarchies (recursive mocks)

Stubbing Properties

- Pre-set values for properties on mock objects
- Changing those values
- SetupAllProperties

Events

- Raise on the mock
- Raise further down the hierarchy
- Non-standard event signatures

Summary

- Able to verify almost every behavior or interaction that can be modeled in code
- Able to establish complex expectations on those behaviors
- Able to control the execution flow of the SUT