Unit Testing using MOQ Framework

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Agenda

• Layered Architecture
• Unit Testing / Test Driven Development
• Why we need mocking
• Mocking Frameworks available
• Sample code using MOQ Framework
• Q & A
Layered Architecture

Most of the software projects will be designed as per below architecture

UI Layer → Business Logic Layer → Data Access Layer → Database
Unit Testing (1 of 3)

- UI Layer
  - Test Methods
- Business Logic Layer
  - Test Methods
- Data Access Layer
  - Test Methods
- Database
Unit Testing (2 of 3)

Each layer will have its own Test Methods.
What happens when I run a test method for a method of Business Logic Layer? Will the test method for BLL will call DAL method?
Why Mocking?

• Mocking is the framework using which you can mock a sub-sequent method call.
• This is required as each layer will have their own test methods.
• Mocking will minimize the calls to sub-sequent layers., and there by stopping to test an already tested method.

Are you confused here 😊

Hmmm!!! Let me clarify again
Mocking Frameworks available

- Some of the mocking frameworks are:
  - MOQ
  - Rhino mock
  - Type Mock
  - FakeItEasy
  - NMock3
Sample Code using MOQ framework

DEMO
Q & A
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