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-- File: Core 3 HW6

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-- 1. What is unit testing as defined by the book?

Unit testing is a form of testing in which individual components are isolated from the rest of the application so their behavior can be thoroughly validated.

-- 2. What is the convention for creating unit tests in ASP.NET Core applications?

A method in a C# class

-- 3. Name three unit test project tools used for ASP.NET Core applications.

mstest - creates a project configureed for the MS Test framework, which is produced by Microsoft

nunit - creates a project configured for the NUnit framework.

xunit - creates a project configured for the XUnit framework.

-- 4. What is the convention for naming unit tests in ASP.NET Core applications?

<ApplicationName>.Tests or SimpleApp.Test pg 111

-- 5. What is the convention for naming the test classes in ASP.NET Core? What is the convention for

naming the methods in the test classes?

SimpleApp.Test

-- 6. What is the purpose of the Fact attribute in Xunit? (not in book) What is the purpose of the Theory

attribute in Xunit?

xUnit used the Fact attribute to denote a parameterless unit test, which test invariants in the code.

Theory attributes denotes a parameterised test that is true for a subset of data.

-- 7. Describe the different elements of the AAA testing pattern.

Arrange refers to setting up the conditions for the test.

Act regers to performing the test.

Assert refers to verifying that the results weas the one that was expected.

-- 8. Describe the use of the methods in the Assert class. Describe the purpose, parameters, and return

value of the Assert.Equals() method.

Static and used to perform different kinds of comparisions between the expected and actual results by comparing the test results to the original property value than the value it has been changed to.

-- 9. What is the key to isolating a component for testing?

Use C# interfaces and separate the controller from the repository.

-- 10. What is a mocking package? What does it do?

A fake or mock object for test. It creates a fake object without having to define a custom test class.

-- 11. (not in book) What is the difference between the Setup() and the SetupGet() methods of Moq?

Setup() can be used for mocking a method or a property.

SetupGet() is specifically for mocking the getter of a property

Took a quick peek at the Moq source code and it looks like if you use Setup() on a property getter, it will call SetupGet().