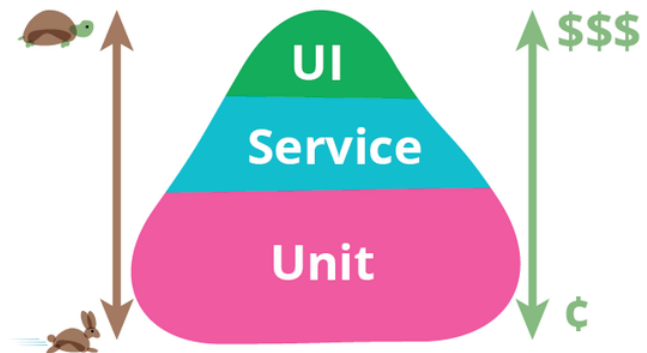# Unit Testing

Function to test another function

Software Development Life Cycle

- Requirement Gathering

- Design => System Aric. , UML => SRS

- Implementation => Writing Code

- Testing => Requirements, Performance, Security
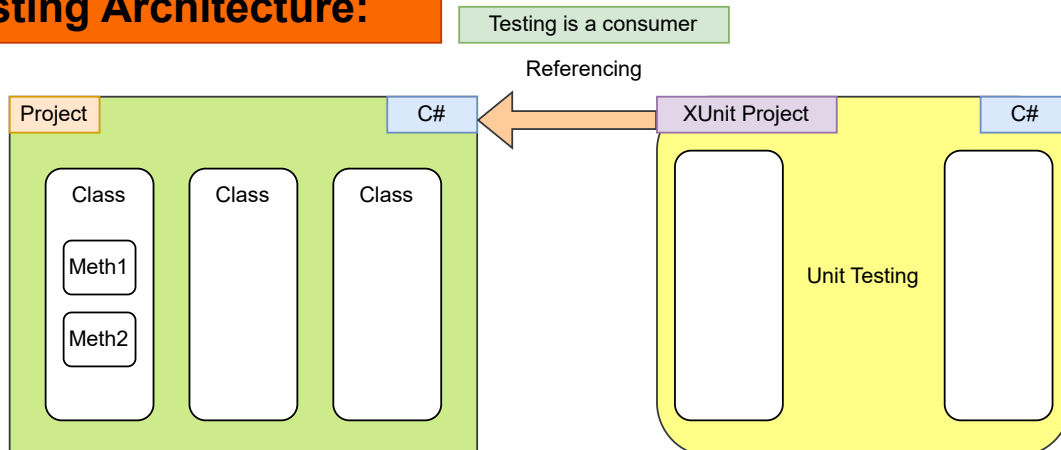
- Deployment

- Mentainence

Testing Types

- Unit Testing => By Developers => white Box Testing

- Integration Testing => By Testers => Black Box Testing

- Acceptance Testing => By Customer

Testing Pyramid:

Testing Architecture:

Testing is a consumer

Referencing

Project	C#
Class	Class	Class
Meth1		
Meth2		

XUnit Project	C#

Unit Testing

Testing Framework:

- MSTest
- Nunit
- XUnit

Naming Conventional

Class => [ClassName]Tests
Method => [MethodName]_[TestCase]_[ExpectedOutput]

Test Pattern: [AAA]

Arrange => prepare data and objects
Act => Execute Method under the test case
Assert => check the result is as expected

Lab

1 boolean Assert
2 string Asserts
1 Collection Assert
1 Numeric Assert
2 Type Assert
1 Reference Assert
1 Exception Assert