Initialization and Cleanup

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Module Overview

- **Create methods to run prior or after tests**
  - **Decorate methods with special attributes**
  - **Assembly, Class, Test**
- **Initialization methods**
- **Cleanup methods**

All Initialization and Cleanup Attributes

Initialization Attributes

AssemblyInitialize	ClassInitialize	TestInitialize
– **Called once for project** – **Setup resources for all test classes in assembly**	– **Called once for a class** – **Setup resources for all tests within a class**	– **Called once for each test method** – **Set or reset resources needed for each test**

Cleanup Attributes

AssemblyCleanup

- **Called once after all tests in assembly have run**
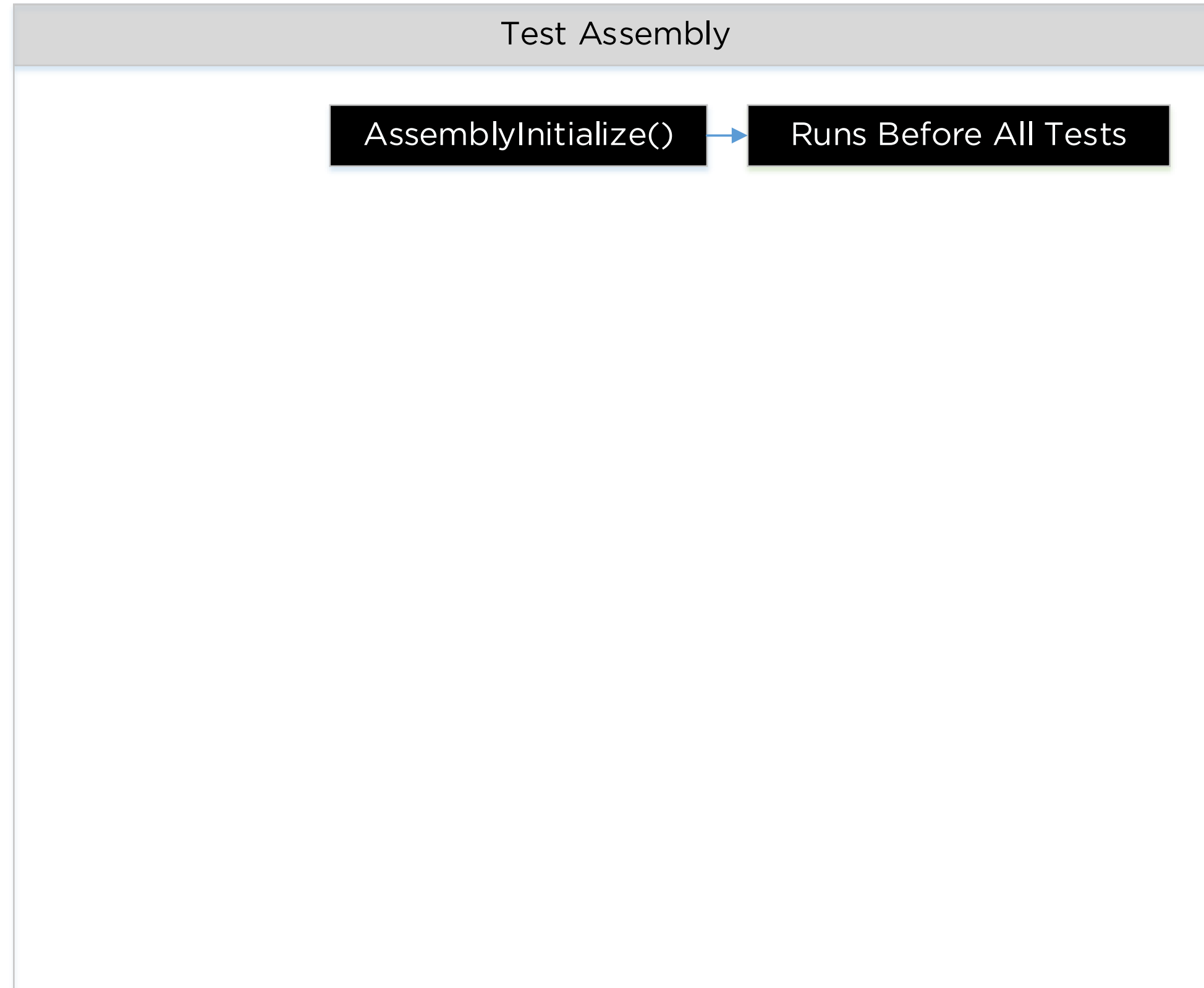
ClassCleanup
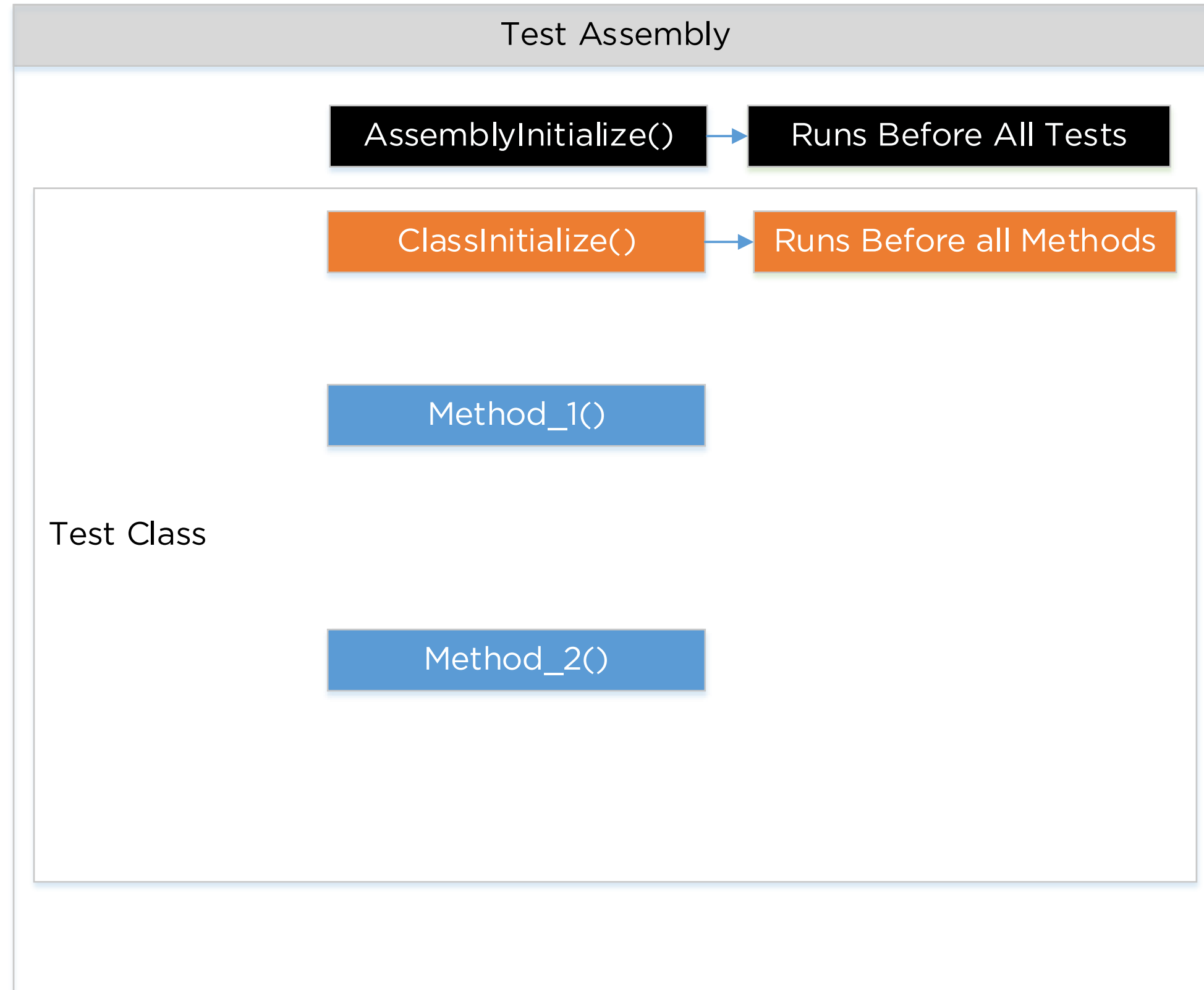
- **Called once after all tests in class have run**

TestCleanup

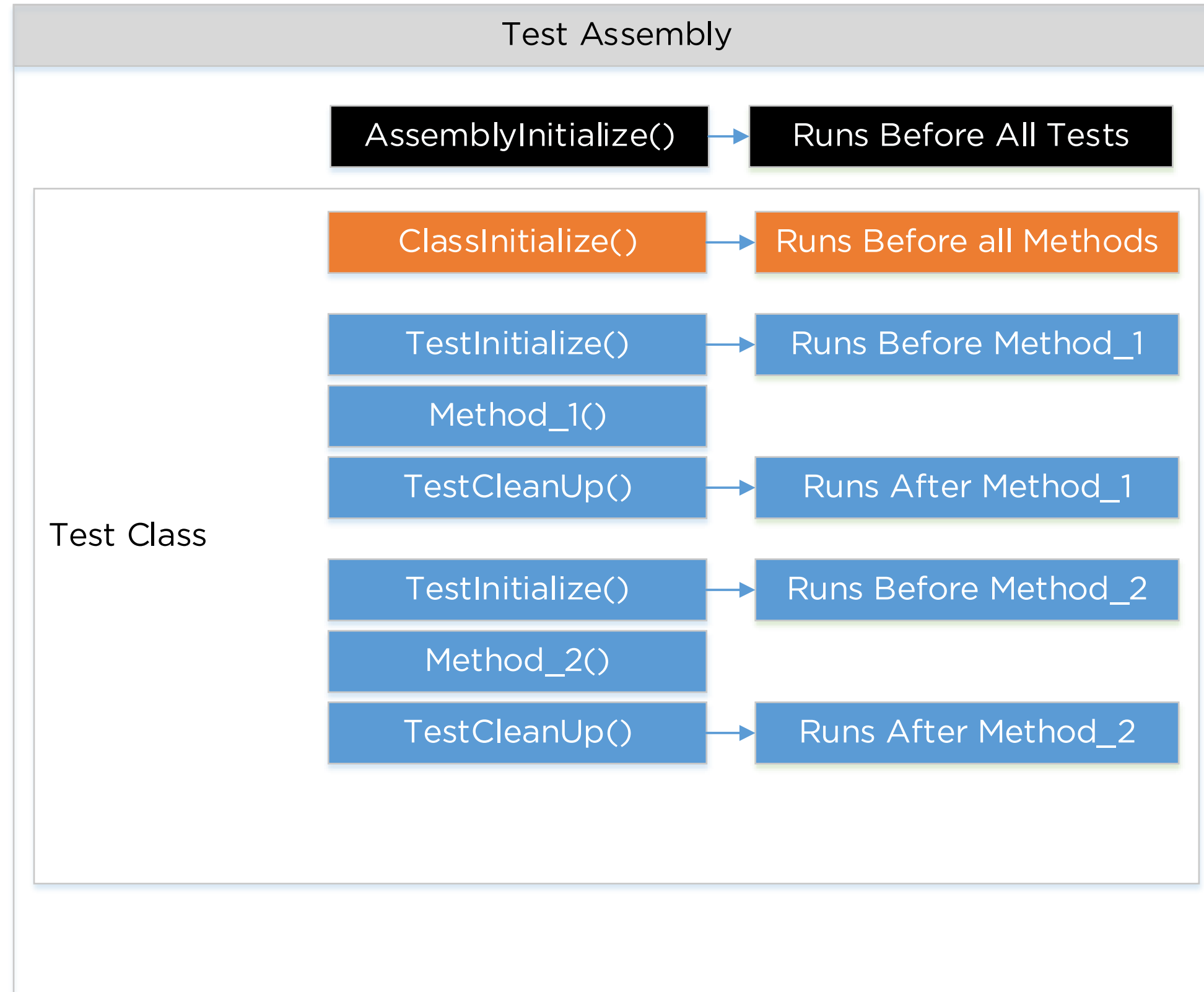- **Called once after each test method has run**
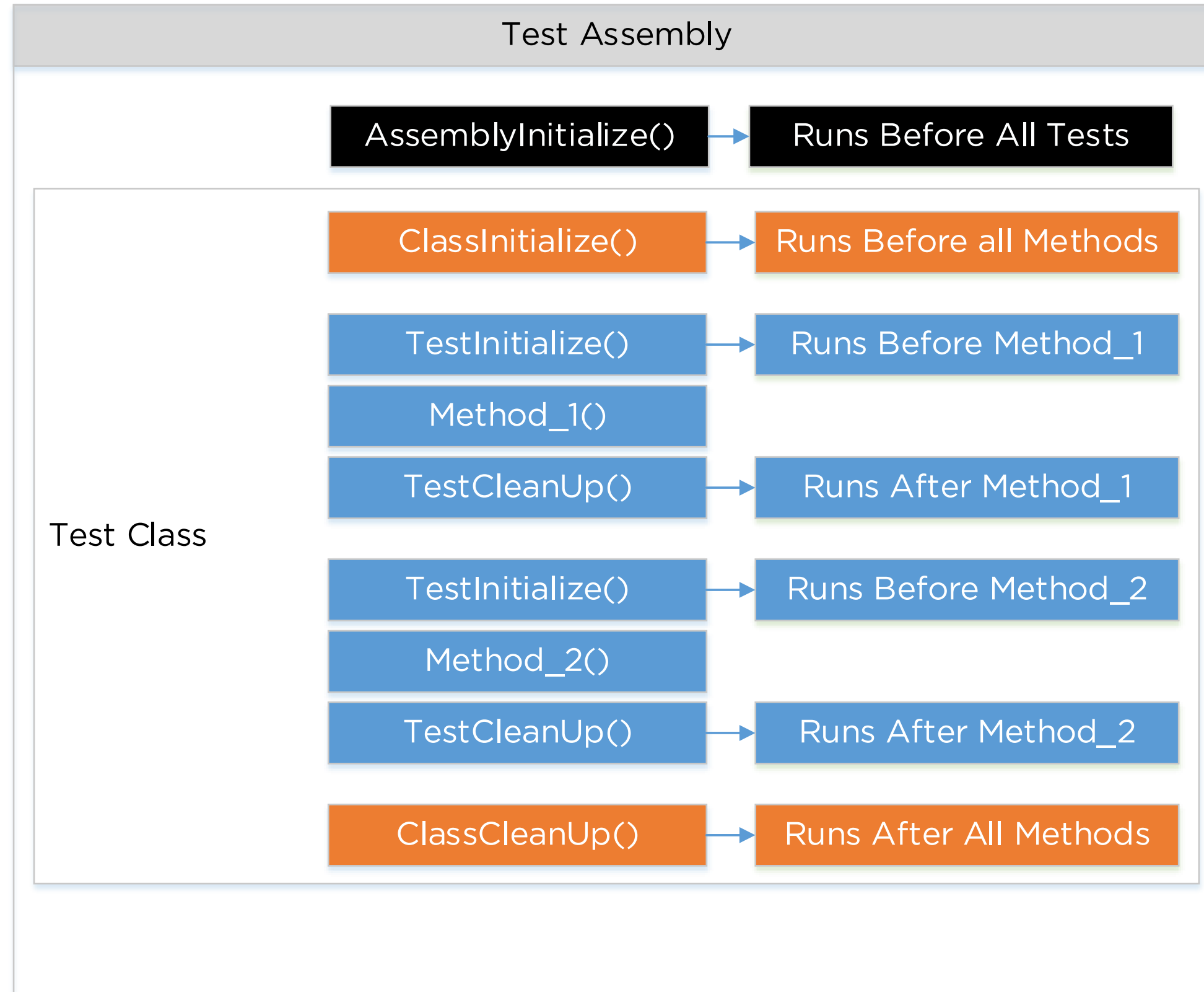
Execution Order

Execution Order

Test Assembly

AssemblyInitialize() → Runs Before All Tests

Execution Order

Execution Order

Execution Order

Test Assembly

| AssemblyInitialize() | → | Runs Before All Tests |

Test Class

| ClassInitialize() | → | Runs Before all Methods |

TestInitialize()	→	Runs Before Method_1
Method_1()		
TestCleanUp()	→	Runs After Method_1

TestInitialize()	→	Runs Before Method_2
Method_2()		
TestCleanUp()	→	Runs After Method_2

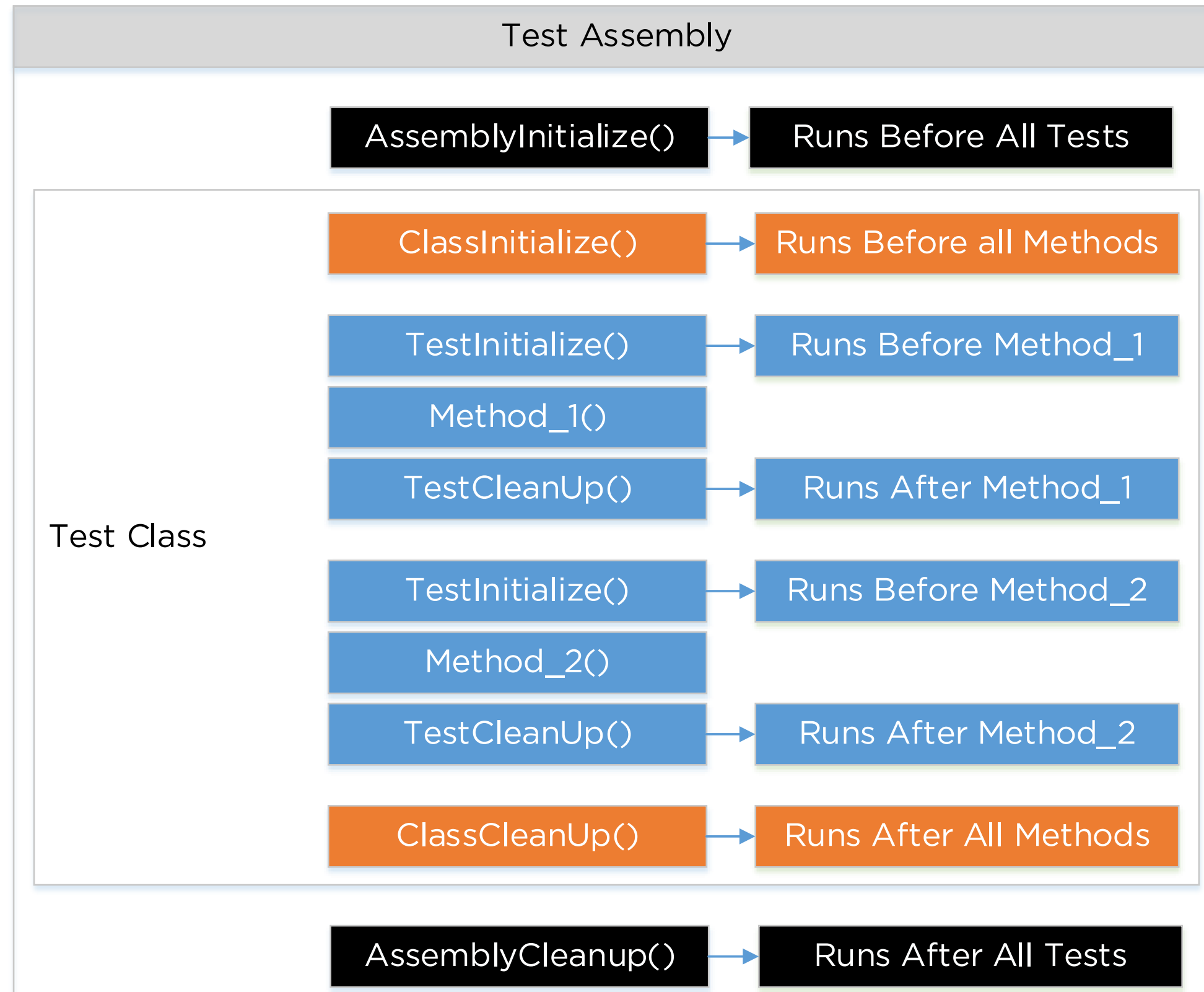| ClassCleanUp() | → | Runs After All Methods |

Execution Order

Assembly

Assembly Initialize and Cleanup

Create a separate class

Decorate methods with attributes

TestContext is passed to Initialize method

Setup resources for all tests (database, text files, etc.)

Demo

Assembly initialization and cleanup

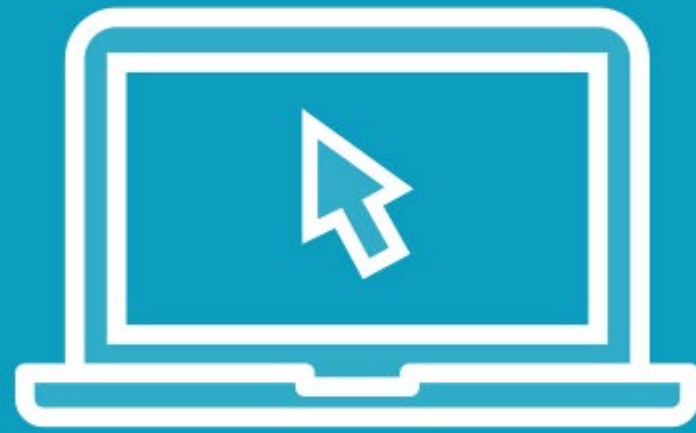# Class

Class Initialize and Cleanup

Place into each test class

Decorate methods with attributes

TestContext is passed to Initialize method

Setup resources for tests in class (initialize data in tables, set text in files, etc.)

Demo

Class initialization and cleanup

Test

Test Initialize and Cleanup

Add methods into test class

Decorate methods with attributes

Can access TestContext property in methods

Methods run before/after each test

TestName property is filled in

Demo

Test initialization and cleanup

Module Summary

Attributes for initialization and cleanup

Execution order

TestContext is available in initialization

Use TestName property for test-specific setup or teardown

Up Next:
Attributes Help You Organize Your Unit Tests