# Observer Pattern UnitTest

[TestClass]

public class UnitTest1

{

ConcreteSubject cSubject;

ConcreteObserver cObserver1, cObserver2, cObserver3;

[TestInitialize]

public void Initialize()

{

cSubject = new ConcreteSubject();

cObserver1 = new ConcreteObserver(cSubject);

cObserver2 = new ConcreteObserver(cSubject);

cObserver3 = new ConcreteObserver(cSubject);

cSubject.Attach(cObserver1);

cSubject.Attach(cObserver2);

cSubject.Attach(cObserver3);

}

[TestMethod]

public void TestObserverPattern()

{

cSubject.State = 1;

Assert.AreEqual(1, cObserver1.State);

Assert.AreEqual(1, cObserver2.State);

Assert.AreEqual(1, cObserver3.State);

cSubject.State = 25;

Assert.AreEqual(25, cObserver1.State);

Assert.AreEqual(25, cObserver2.State);

Assert.AreEqual(25, cObserver3.State);

cSubject.Detach(cObserver2);

cSubject.State = 42;

Assert.AreEqual(42, cObserver1.State);

Assert.AreEqual(25, cObserver2.State);

Assert.AreEqual(42, cObserver3.State);

}

}