

# nmock2 Cheat Sheet

## Setting Up

```
Mockery mockery = new Mockery();
```

## Creating mocks

```
interfaceMock = mockery.NewMock<InterfaceToBeMocked>();
classMock = mockery.NewMock<ClassToBeMocked>([mock style], [constructor arguments]);
namedMock = mockery.NewNamedMock<TypeToBeMocked>("name". [mock style], [ctr args]);
```

## Mock Styles

MockStyle.Default	Calls to members that do not have expectations set will result in ExpectationExceptions.
MockStyle.Transparent (classes only)	Calls to members that do not have expectations set will pass through to the underlying implementation on the class being mocked.

## Using Default Expectation (same as AtLeastOnce)

```
Expect.On(aMock).Method( ... )
    .With( ... )
    .Will(Return.Value( ... ));
```

## Setting Basic Expectations

```
Expect.Once.On(aMock).Method( ... )
    .With( ... )
    .Will(Return.Value( ... ));
```

## Setting Expectation That Throws Exception

```
Expect.Once.On(aMock).Will(Throw.Exception( ... ));
```

## Setting Expectation On a Getter

```
Expect.Once.On(aMock)
    .GetProperty( ... )
    .Will(Return.Value( ... ));
```

## Setting Expectation On a Setter

```
Expect.Once.On(aMock)
    .SetProperty( ... )
    .To( ... );
```

## Setting Expectation On Out Parameters

```
Expect.Once.On(aMock).Method( ... )
    .With(Is.Anything, Is.Out) // Is.Out -> paramname
    .Will(Return.Value( ... ), Return.OutValue("paramname", value));
```

## Setting Expectation On Generic Method Type Parameters

(e.g. aMock.GenericMethod<int, string>());

```
Expect.Once.On(aMock).Method("GenericMethod", typeof(int), typeof(string));
```

## Stubs

**Expect** can be replaced with **Stub** which essentially means 'zero or more'. Behavior of the stub will be invoked if called, but the stub will not cause the test to fail.

```
Stub.On(aMock)
    .Method( ... )
    .With( ... )
    .Will(Return.Value( ... ));
```

## Constraining Order

Mocks by default can be in any order. To constrain the order of a set of expectations, wrap the expectations with a using block.

```
using (mockery.Ordered) {
    Expect.Once.On( ...
    Expect.Once.On( ...
}
```

## Event Addition / Removal

```
Expect.Once.On(aMock).EventAdd("eventname");
Expect.Once.On(aMock).EventRemove("eventname");
```

## Fire Events

```
Fire.Event("eventname")
    .On(aMock)
    .With(sender, eventargs);
```

## Possible Method Call Expectations

Expect.Once	Expect.Never	Expect.AtLeastOnce
Expect.AtLeast(<# times>)	Expect.AtMost(<# times>)	Expect.Exactly(<# times>)
Expect.Between(<# times>, <# times>)		

## Thread Synchronization – signal an EventWaitHandle

```
Expect.Once.On(aMock).Method(...).Will(Signal.EventWaitHandle(signal));
```

## Verification

```
mockery.VerifyAllExpectationsHaveBeenMet();
```

## Verification Alternative

```
using (Mockery mockery = new Mockery())
{ ... } // Dispose calls Verify...()
```

## Add Comments That Are Shown In Error Message

```
Expect.Once.On(aMock).Method(...).Comment("Comment explaining why this is expected");
```