# Exercises: Mocking

This document defines the **in-class exercises** assignments for the ["High-Quality Code" course @ Software University](https://softuni.bg/courses/high-quality-code).

<http://stackoverflow.com/questions/2425721/unit-testing-datetime-now>

<http://stackoverflow.com/questions/9942163/how-to-mock-datetime-now-in-unit-tests>

<https://softuni.bg/Forum/3036/Technical-Issue-Unit-Tests-with-Moq-CollectionAssert>

## DateTime.Now.AddDays()

Test the method **DateTime.Now.AddDays()**. Use mocking to provide the **DateTime** objects you need.

It is important that you test **DateTime.Now**, so don't use **new DateTime()** for the tests.

Some cases to consider:

* Adding a day to the middle of the month, for example 16th June -> 17th June
* Adding a day which will be in the next month (31st July -> 1st August)
* Adding a negative value (-5 days), also check negative values which go on to the previous month
* Adding a day to a leap year (28th February 2008 -> 29th February 2008)
* Check the previous test with non-leap years (28th February 1900 -> 1st Match 1900)
* Add a day to DateTime.MinValue and DateTime.MaxValue
* Subtract a day from DateTime.MinValue and DateTime.MaxValue

You can also make other tests if you wish.

## Tire Pressure Monitoring System

You are given a small project for a system which monitors the pressure in car tires. Your task is to write unit tests for the system. You will need to use mocking in order to pass dependencies. Think about the corner cases of the project.