

# Test able code

Jiří Pokorný

[Jiri.Pokorny@solarwinds.com](mailto:Jiri.Pokorny@solarwinds.com)



# Task 1.

- » Improve test ability to be able extend the application:
  - First refactoring is critical, we don't have tests yet
  - Extract **only necessary code** to internal static methods
  - Later we are able to transform them to instance methods
  - Best practice is to avoid „public static“  
(e.g. SingleTon, Service locator)

# Task 1.

- Writing unit tests:
  - We are going to use „Test first“ strategy
  - Allow access internal members by adding **InternalsVisibleTo(„Tests“)**
  - Add new test project
  - Use MSTests attributes to decorate the test methods
  - Use Assert to validate the output
  - Validate „**Test Coverage**“ (e.g. using JetBrains dotCover)

# Task 2.

- » Add new command for multiplication:
  - Add new failing **test First**
  - Add the missing method implementation
  - Add the command usage to the application

# Task 3.

- » Change the code so it can be used with Windows phone application User interface
  - Extract all calls to „Console“ class
  - Define user interaction Interface
  - Create Fake User interface to simulate user interaction (e.g. Moq library)
  - Write missing unit tests