

# Programing Technologies

## Lesson 7

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1. Carefully follow the presentation about JUnit (available online at the page of the class).  
Add some extra features to a pre-defined project.
2. Download the `progtech_L8_start.zip` project from the page of the class and import it to NetBeans.
3. Try to understand the sample classes.
4. Go through together on the tests. Modify the tests when it is needed.
5. Create a new project without a Main class. The name of it should be `myJUnit4`
6. Add a class into the `myPackage` package. The name of the class is `Rectangle`. It has two double fields `a` and `b`. Add getters and setters for these two fields.
7. Add a new Exception to the package named `WrongLengthException`. Throw this exception if the `setA` or `setB` methods get a non-positive number as a parameter.
8. Add two new methods to the `Rectangle` class: `Area` and `Circumference`.
9. Add a Junit test to the project on the `Rectangle` class. Test the followings:
  - The `setA` method throws `WrongLengthException` for wrong values
  - The `setB` method throws `WrongLengthException` for wrong values
  - The `setA` method sets the value correctly
  - The `setB` method sets the value correctly
  - The `Area` and the `Circomference` methods work correctly