

# Junit Übung

- Projekt besteht aus folgenden Klassen:
  - ShoppingCart.java
  - Product.java
  - ProductNotFound.java

Die Aufgabe besteht darin eine Testklasse zu erstellen und diese mit Tests zu füllen, die den Specifications des Projekts entsprechen.

*Specifications → Lösungen für Requirements*

## ► Specifications

- When created, the cart has 0 items
- When empty, the cart has 0 items
- When a new product is added, the number of items must be incremented
- When a new product is added, the new balance must be the sum of the previous balance plus the cost of the new product
- When an item is removed, the number of items must be decreased
- When a product not in the cart is removed, a **ProductNotFoundException** must be thrown
  - Hint: insert the call in a try block and put a **fail()** after the call to **removeItem()**

# Exercise 2: converter

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- ▶ Write a class with a static method that converts a string into an integer value
- ▶ Specifications
  - ▶ The method must accept a string and convert it into an integer
  - ▶ Well formed strings does not contain characters different from numbers, trailing spaces and minus
  - ▶ The represented number must be in the range  $[-32768, 32767]$
  - ▶ No real number are allowed
- ▶ OK: “ -3”, “500”, “-10”, “32767”
- ▶ NO: “2 3”, “32768”, “A3”, “2.3”

## Exercise 2: converter (2)

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- ▶ Exploit JUnit to test the defined method
- ▶ Test also boundary conditions
- ▶ Hint 1: throw an exception in the converter method, and test if the exception has been thrown when the method is called with bad arguments
- ▶ Hint 2: exploit the `Integer.parseInt ()` method for both the conversion and the check