23.2.2015 - Exercises for Chapters 6 and 7

1. A new furniture company called MyKea wants a computer application in order to automatically handle the items they are selling. For now they want to start with only 4 items as described below:

- Chair
- Bean Bag
- Desk
- Table

The first requirement from them is given a list of items, to be able to sort them out by price and by weight.
Write an App that fulfills this requirement.

2. After months of research they have invented a "Magic Box" with 3 slots. The great thing about it is that they can put whatever kind of item they are selling in one slot, so they can pack boxes containing 3 items.

The "Magic Box" will be able to compute the total weight it contains and the total price.
Extend the App to fulfill the new requirement.

3. After few months in the business, the company is being very successful and the number of sales have incremented noticeably. Now they need a more sophisticated method of sending the Magic Boxes, they want to have a system in which they can assign priorities to the Boxes and put them in a conveyor belt, later on, the truck drivers must get the Boxes sorted by priority.

Extend the App to fulfill the new requirement.

4. Find and fix the bug(s) that are preventing the following tests from passing.

- com.zanox.blue.parking.ParkInTheStreetTest
- com.zanox.blue.parking.ParkingTest

5. Extend MyKea application with a functionality that allows to print out the current stock as per the following sample:

Item Name	Amount	Weight	Price	Description
Bean Bag	10	1kg	10Eur	Hugh bag full of beans inside.
Chair	2	3kg	40Eur	Special chair with 4 legs.
Table	1	20kg	100Eur	Brown table with 4 legs.
Etc	etc	etc	etc	etc

6. Extend the application with a functionality that allows searching items by a given **keyword** inside the item description.

      Sample: For the given keyword "bag", and given we have one item in the stock containing this word in the description field, the App should return something like:

Items found containing "bag":

Item Name	Amount	Weight	Price	Description
Bean Bag	10	1kg	10Eur	Hugh bag full of beans inside.