**E4SWD-01**

Stock trading system

**Afleveret:**

**Afleveret af:**

**Deltagere i afleveringen**

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Indhold

[Indledning 2](#_Toc53145930)

# Indledning

In this exercise, you will design a stock trading system in which stocks values are continuously updated and in which you can buy and sell stocks. Through this, you will get familiar with the use of the GoF Observer pattern.

# Exercise 1:

Considering the GoF Observer pattern, what is/are the subject(s), and what is/are the observer(s) in the stock trading system? Which variant of GoF Observer is applicable – or would you rather create your own?

* Stocks is to GOF Observer pattern consider as concrete subjects whereas its interface is the subject.

(*Stocks, which live a life of their own. Their values are periodically updated, and when this happens, a Portfolio must be informed of the changes.)*

* A portfolio is a concrete observer whereas its interfance is observer.

*(A Portfolio, which keeps track of the currently owned stocks (stock name, amount of stocks and value) and the total stock value.)*

* A portfolio display is neither a subject nor observer

*(A Portfolio Display, which is used to output information on the currently held portfolio.)*

We are going forward with the push variant, because we have decided its best implement upon an update it will be send with as event message.

# Exercise 2:

Design a system in which Stocks may be added to a Portfolio, which should then automatically be notified if the value of the Stock changes. When this happens, the Portfolio Display should make sure that the stocks in the portfolio are printed to screen. Changing stock values could be done from a command line interface, e.g. VESTAS 570.50 or GOOGLE: 943.29. Create a design document, with a short description of your design and design choices and the class diagram(s) and sequence diagram(s) you need to explain your design (at least one of each).



