

## Exercise Sheet 6

### November 23: OO-Principles I

#### Exercise 1

We investigate the Use Case “The Payroll Case Study” in Robert Martin’s book

1. We will find the right abstractions looking at the specification and use cases! Read the pages from the Martin’s book (see below). Also the document `PayrollCaseStudy.pdf` (resp. <http://www.objectmentor.com/resources/articles/underlay.pdf>) might be helpful!
2. We will apply design patterns and OO-principles learned so far!
3. We will analyze and criticize our design!

Tasks:

1. Preparation: You must read the pages 147–151 and p 192–250 in *Robert Cecil Martin. Agile Software Development: Principles, Patterns, and Practices. Prentice Hall PTR, Upper Saddle River, NJ, USA, 2003* or alternatively, pages 293–298 and p 349–363 in *Robert C. Martin and Micah Martin. Agile Principles, Patterns, and Practices in C# (Robert C. Martin). Prentice Hall PTR, Upper Saddle River, NJ, USA, 2006*.
2. Working in pairs, prepare a short summary of your understanding of the design (UML)!
3. Think about alternative designs!
4. Plenum discussion to verify understanding, clarify open points and exchange ideas and assessment

#### Exercise 2

Read the articles <http://reocities.com/tablizer/martin1.htm> and <http://reocities.com/tablizer/payroll12.htm>!

1. Prepare a short summary of the main arguments!
2. What do you think about the criticism?

#### Hints

- Consult the literature!
- You can work in pairs, if you want!
- If you want to learn a Java API, look into the java docs!
- Always use the same familiar IDE (suggestion Eclipse)!