

## Exercise Sheet 1

### Software Engineering – Design

In this semester we'll develop an application in small groups. You'll need your experiences of earlier lectures and the knowledge of *Software Engineering – Analysis*!

Some questions to begin with, based on your experience from the *Software Engineering – Analysis* course last Winter:

1. What are the differences between *generic* software product development and *custom* software product development?
2. One interesting topic in the Winter has been *System Engineering*!
  - a) Please think about an example of a complex computer-based system with high software content. Sketch the structure and explain the components!
  - b) Please state the differences and commonalities of *system* and *software* engineering!
3. Software Project Estimation:
  - a) What is the motivation for software measuring, metrics and project estimation? Gather some arguments and describe them in your own words!
  - b) Review the *Function Points*-Method!
  - c) Review *COCOMO II*.
4. Make yourself familiar with the Moodle platform, if not done already!
5. There will be project work this term. It has to be documented as PDFs. Please use the Moodle database to keep your documents available during the semester and for the final examination.
6. In addition we'll need an **SCM**. Under most operation systems Git and Subversion are available. Please present the features and handling of typical SCM tools!
7. An SCM server for your project is a must! You may talk to our tutors for assistance.
8. Setup a framework (documents, plans, etc.) for this semester's development work!