Learning aims:

- Familiarize with and discuss scientific research in the field of FOSS.
- Develop further questions in the field of FOSS; improve practice sheet.

Task 6 – 1: expand knowledge about the case study presented during the lecture

Read chapters 1, 2 and 3 of the case study "Two Case Studies of Open Source Software Development: Apache and Mozilla" by A. Mockus, R.T. Fielding and James D. Herbsleb (to be found on the lecture's website) and answer the following questions. Do not concentrate on probabilistic details and skip those parts dealing with concrete commercial projects! Back up your answers by listing the respective parts in the article:

1. Which main differences are named concerning the development process of OSS in comparison to "industrial" processes?
2. Which research question(s) is/are studied dealing with the relation to the clients of the projects in focus?
3. What is meant by MR?
4. Which data (sources) were referred to during analysis in the individual OSS projects in focus?
5. How are code changes brought to the CVS in Apache and who is allowed to do it?
6. Which are the results for Apache concerning research question Q3 and the points "code changes" und "fixes"?
7. Which are the results for Apache concerning research question Q6?

Task 6 – 2: read up on further case studies on OSS

Read up on further scientific case studies on OSS projects. Prepare to present the target (OSS project), research approach and result of the case study you found most interesting in a presentation of 10 to 15 minutes. Include the answers to the following questions:

1. Why did you choose this case study?
2. What is your opinion on the scientific approach in this case study?
3. How do you evaluate the results with respect to their reliability and transferability on similar OSS projects?
Task 6 – 3: (continuation of practice sheet 5, task 5-2)
If you submitted a patch (i.e. you did task 5-1), you don’t need to do this task, but instead you should tell the other students whether you got any further feedback from your patch submission.

Determine the following figures of the open source project investigated by you. **We will compare them in the tutorial:**

1. Guidelines/specifications (e.g. security guidelines; code style present?)
2. Number of mails on developer's mailing list in the last 3 months
3. Number of developers (core/committer/contributors)
4. Partners (e.g. university/industry)
5. Size of project: LoC (and which programming language)
6. Bugs: Number of open bugs (absolute) / LoC
7. Activity: Commits / LoC
8. Channels of communication (e.g. mailing list, Wiki present?)

Note down for each figure the way you determined it. Think about which hypotheses you may formulate with these figures and which constraints apply.

Task 6 – 4: improve practice sheet
Think about a new task or improve one of the existing ones (if you like, work in pairs). This could be:

1. An interesting question concerning the study of Mockus et al. (task 6-1).
2. An interesting question concerning the article/case study found by you (task 6-2).
3. A new task in the field of OSS development (be inspired by the lecture's contents).