**Practice sheet 4 – due on 2011-11-14 and 2011-11-21**

**Learning Aims:**

- Work out the aspired solution for the selected issue of your OSS project
- Get in touch with the community of your chosen OSS project to discuss your aspired solution

**Task 4 – 1: (Solution Approach for Issue, due on 2011-11-14)**

The aim of this task is to develop a solution approach for the issue of the OSS project you selected in task 3 – 2.

**Develop a solution approach (no coding yet) for the issue from task 3 – 2**.
To do so you need to:

1. Gain a deep understanding of the problem.
2. Be aware of the overall goal or roadmap of the project.
3. Become familiar with the project's API.
4. Become familiar with the project's test framework.
5. Remember that most of the time there are various different ways to implement something.

**Task 4 – 2: (Discuss Solution Approach with Community, due on 2011-11-14)**
The aim of this task is to present your solution approach to the community of your OSS project and get input from the members concerning your aspired solution approach to increase the chance of getting reviews and getting your solution into the project later.

1. **Send your solution approach to the community of your OSS project**.
   Formulate your solution approach and your considerations in an email and send it to the appropriate mailing list for the project in order to discuss your approach with the community.
   *Hint: You have a considerably higher chance of acceptance for your patch if you communicate constructively with the community and if you adapt their form of communication and approach. Quite important:* ***First think, then post!***

   **Apache tips for email contributors:**
   **http://www.apache.org/dev/contrib-email-tips.html**

2. **Put your solution approach or your email with your solution approach on your project site in the Softwareprozesse Wiki** in the Blackboard system and be prepared to present your email and any possible replies from the community to your fellow students in the tutorial on **2010-11-14.**

*Blackboard Submission: Just paste your email or again the link to your wiki page containing the email in the text field "Übermittlung".*

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### Task 4 – 3: (Refine Solution Approach, due on 2011-11-21)

The aim of this task is to have a refined solution approach which takes account of the input from the discussion with the community.

1. **Actively encourage the discussion with the community** concerning your solution approach.
   a) **Be open to ideas as well as critique and ask for suggestions**.

2. **Refine your solution approach** from task 4 – 1 so that it takes account of the input from the discussion with the community.

3. **Summary: discussion and solution approach**
   a) Describe the discussion with the community: How did it start? How was the process?
   b) What input did you get concerning your solution approach?
   c) In what way did the discussion and the input from the community affect your solution approach?
   d) How does your solution approach look like now?
   e) Did you like the atmosphere of the discussion?

   Put this summary on your project site in the **Softwareprozesse Wiki** in the **Blackboard system** and be prepared to present it to your fellow students.

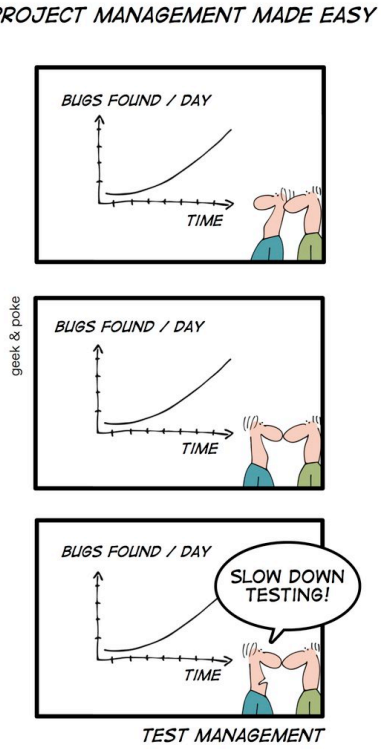
### Task 4 – 4: (Write Test Code for issue, due on 2011-11-21)

The aim of this task is to have a test case that fails because the (production) code for your issue is not yet implemented.

1. In case your issue is a bug write one or more test cases to reproduce the failure.

2. In case your issue is a feature write one or more test cases that indicate that the feature is missing.

3. Explain your test and why it is correct for showing the failure or missing feature.




***Blackboard Submission:*** *Include the link to the summary from task 4 – 3 as well as your test case and its explanation from task 4 – 4.*