

17-708: Software Product Lines

Assignment 1: Case Study Reflection

In this assignment, you will read one case study about a software product line project in industry. You will distill the key issues into a short presentation. We will use the Wednesday lecture for presentations in a random order.

The key learning goals of this assignment are:

- Exposure to the breadth of technical and nontechnical issues in software product line engineering practice.
- Extracting and effectively communicating the key information in a fixed time frame.
- Applying concepts of domain and application engineering
- Identifying the business case for software product line engineering

Task

Read the case study and identify the (one or two) most interesting aspects that you want to communicate to the class. Prepare a 10 minute presentation that communicates the key insights from the case study. Your communication should include:

- Sufficient context information to understand the case
- What were the reasons to adopt a software product line strategy (problems, goals)
- What development process did the company follow (domain/application engineering)?
- What challenges had to be overcome? What benefits were gained?
- What can be learned from this case for other projects

You will have 10 minutes to present the case to the class. The time limit is strictly enforced. For effective communication, you may want to prepare slides. Be aware that short presentations are more difficult than long ones. You will not be able to present all material from the case description, but you will have to make a choice what to focus on; that choice can be based on your personal interests. Explore one or two topics in some depth instead of covering many aspects of the case. Ensure that you get to the point quickly and eliminate all information that is not essential. However, still provide sufficient context information that the key issues understandable for your target audience. Your primary target audience is your fellow students.

During the presentations next week, we will hand out feedback sheets and expect that every student is able to identify at least one key lesson and is able to ask one question. We will have a few minutes for questions after each presentation.

Deadlines, Technicalities, and Deliverables

1. **Choose one of the case studies** available in the book “Software Product Lines in Action” (<http://link.springer.com/book/10.1007%2F978-3-540-71437-8>) and inform the instructor. The instructor will avoid overlapping selections; first come first serve.
2. By Sep 9, 8am: **Send a presentation (only a title slide should you not want to use slides) as PDF** to the instructor. All PDFs will be collected before class on a shared laptop. If you need a non-PDF means of presentation send a PDF anyway and prepare for a presentation on your own laptop.
3. During class: **Communicate the case to the entire class within 10 minutes.**
4. During class: **Listen to other presentations** and provide feedback to presenters.

Grading

We expect

- That the case was well understood and at least one interesting issue is identified
- An effective presentation that communicates the selected aspects with sufficient context within the time limit
- A presentation that addresses all five points listed above
- Feedback for other presentations given in class

To clarify expectations, here is the feedback sheet that everybody will use in class.

708 Case Studies - Feedback Sheet

Presenter:

Your name:

Name a key lesson learned from this presentation:

State one question regarding the context, the issue, or the lesson learned:

Suggest one thing how the presenters can best improve their communication (please be honest and constructive, we do not use this for grading the presenters):