

Exercises 2

20th September

- 1) Prescriptive vs. descriptive modeling:
 - a. Explain the difference between a descriptive and a prescriptive process model?
 - b. Assume you do not have the time to interview persons about their development process. What could be other means for eliciting a process in a company?
 - c. What are the risks of introducing a prescriptive model in a company?

- 2) Lifecycle vs. engineering model:
 - a. What is the difference between a lifecycle model and an engineering model? Name two examples each and explain why they fit into their corresponding category.

- 3) Iterative processes:
 - a. What is the difference between an increment and an iteration?
 - b. Try to find information on how many persons can participate as a maximum in an Extreme Programming/Scrum project?
 - c. In which kind of situations might an iterative enhancement model be difficult to apply?

- 4) Deployment:
 - a. Describe two typical problems that may occur while deploying a prescriptive process model. For each of these problems, discuss potential strategies for overcoming it.

- 5) Determination of the effects of process models:
 - a. Consider the empirical relationship between effects of a process, the process itself, and the context. Assume, you were a project manager and had to select a quality assurance process for your department. What kind of effects could be important for your company context? What might be possible impact factors and what kind of quality assurance technique would be appropriate?
 - b. Try to find empirical evidence that is publicly available that describes such kind of relationship and provides guidance for selecting appropriate techniques for a specific context and quality goal.

- 6) International process standards:
 - a. Explain the role of process standards in safety-critical domains? Why are they relevant?