TU Kaiserslautern
Dept. of Computer Science
AG Software Engineering: Dependability

Quality Management of Software and Systems (WS15/16)

Problem Set 3

Due: in exercise, 16.12.2015

Problem 1: V-Model XT

- a) What is the V-model XT? (Explain it in your own words)
- b) What are the goals of the V-model XT?
- c) The company "Truck Corp." will purchase a new information system to get a better overview of the actual positions of their trucks. After cost estimation and a risk assessment the project, named "DRIVE", was approved. The company uses the V-model XT to handle such projects. Which steps have to be executed related to the V-model XT from the view of the "Truck Corp." organization (client)?

Hint: Remember the execution strategy for clients in the V-model.

d) Please give an overview of the documents (output products of the model steps) which should be produced by the project team of "DRIVE" during the project life cycle. Make a Relation between the documents and the V-model steps.

Problem 2: Extreme Programming

- a) Give a brief overview of XP.
- b) What are the advantages and disadvantages of XP?

Problem 3: CMM

- a) What's the purpose of CMM?
- b) Give an overview of the CMM levels and the meanings behind?
- c) How is a CMM level structured?
- d) Work out a questionnaire for the KPA (Key Performance Area) "Software Project Planning" of maturity level 2?

Key Practices of the Capability Maturity Model Version 1.1 http://resources.sei.cmu.edu/library/asset-view.cfm?assetID=11965