



Beratung für
Softwarequalitätsmanagement
und Prozessverbesserung

Representation of the maturity model CMMI in XML format

Bachelor / Master Thesis

The project CMMI NG (Next Generation) was started recently to revise the maturity model CMMI and the tools around it.

In this context, an XML representation of CMMI is to be developed. The task of this thesis is to provide such a representation.

The main requirements that will have to be addressed are:

- Represent the model CMMI in XML format, based on the definition of a suitable XSD schema
- Support all three constellations of CMMI, i.e. CMMI-DEV, CMMI-SVC and CMMI-ACQ. Ideally, model components that are used in more than one constellation should only be documented once.
- Create appropriate XSL / XSLT transformations to represent CMMI
 - a. as a book / in PDF
 - b. in HTML
 - c. some Wiki-like format

Depending on the status of the project when the work on the thesis starts, the detailed requirements will be available in more or less detail, and will have to be refined accordingly as a first step.

Since this work is to support the current CMMI Next Generation project, all relevant documents are to be written in English language. The student working on this topic will be expected to present intermediate results to the project team.

Schedule: the thesis should preferably be completed by autumn 2015.

Prerequisites: students wanting to write their thesis on this topic should have a basic knowledge of CMMI and advance knowledge of the relevant XML technologies.

Thesis supervisor will be Prof. Dr. Ralf Kneuper, guest lecturer (Lehrbeauftragter) at the Institut für Angewandte Informatik und Formale Beschreibungsverfahren (AIFB), KIT.

If you are interested in this topic, please read the “Grundregeln bei der Betreuung von Abschlussarbeiten” (<http://kneuper.de/Lehrauftraege/arbeiten.html#grundregeln>) and contact me.

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