Abstract

The specification of requirements is a decisive phase in the software engineering process. A special challenge is the collaboration with prospective users of the software application or service. Therefore, the most important step is the development of a common understanding among all stakeholders of the software development process, e.g. through elicitation, prioritization and discussion of requirements among users, software developers, project managers or service providers. This thesis introduces the SoftWiki methodology for implementing a requirements engineering process. The presented methodology is based on research within the fields of agile software engineering and agile knowledge engineering. The SoftWiki methodology includes a formal requirements engineering vocabulary based on the description language OWL, a prototype for the realization of the methodology and a process for information integration in the general software development process. An application scenario in which the described problem occurs, concerns especially web applications, that are typically used by large, distributed online communities, as well as open source projects and their communities where software developers, users and integrators develop software in collaboration. Other application scenarios include cross-functional software applications in large enterprises as well as applications in E-Government. An evaluation of the methodology applied in these fields is provided within this thesis.