

Focus Group Proposal: “Software specification in continuous software development done right”.

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With the procession of agile, lean and DevOps development processes, some traditional patterns of software specification, documentation and knowledge preservation are not applicable anymore. One of the main challenges is dealing with software specifications in a continuous development flow. Especially making sure that specifications are in-sync with source code and configuration items, while providing an immediate benefit to developers during an iteration is an issue to be solved.

In this focus group, we invite the participants for a discussion on topics related to specification in continuous software development. Among others, we would like to discuss the following questions as a starting point to the discussion:

1. Should software design specifications still be organized around self-contained documents? What alternative forms of organizing specification items are a better fit for continuous software development?
2. What is the role of architecture specification in continuous software development?
3. What types of software specifications provide the most benefit to developers? When should such specifications be created? When should they be discarded?
4. Refactoring has become a common technique for improving the structure and quality of source-code. How can similar techniques be used for specifications to make sure that software design specifications are still accurate and valuable to the stakeholders?
5. How to efficiently deal with (architectural) design decisions?
6. How to efficiently preserve (architectural) knowledge and skills a development team gained throughout multiple iterations/projects? What difference exists between application-generic and application-specific knowledge and skills?

The results of the focus group will be submitted to the EuroPloP proceedings. Ideally, we can form a workgroup to come up with a pattern language of specification patterns in continuous software development.