Third International Workshop on Feature-Oriented Software Development (FOSD 2011)

http://fosd.de/2011

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ABSTRACT

Feature orientation is an emerging paradigm of software development. It supports the automatic generation of large-scale software systems from a set of units of functionality called features. The key idea of feature-oriented software development (FOSD) is to emphasize the similarities of a family of software systems for a given application domain (e.g., database systems, banking software, text processing systems) with the goal of reusing software artifacts among the family members. Features distinguish different members of the family. A feature is a unit of functionality that satisfies a requirement, represents a design decision, and provides a potential configuration option. A challenge in FOSD is that a feature does not map cleanly to an isolated module of code. Rather it may affect (“cut across”) many components/artifacts of a software system. Furthermore, the decomposition of a software system into its features gives rise to a combinatorial explosion of possible feature combinations and interactions. Research on FOSD has shown that the concept of features pervades all phases of the software life cycle and requires a proper treatment in terms of analysis, design, and programming techniques, methods, languages, and tools, as well as formalisms and theory.

KEYNOTE

Manfred Broy from the Technical University of Munich agreed to give a keynote.

MOTIVATION

The primary goal of the 3rd International Workshop on Feature-Oriented Software Development (FOSD) is to foster and strengthen the collaboration between the researchers who work in the field of FOSD and in the related fields of software product lines, service-oriented architecture, and model-driven engineering. The focus of FOSD’11 will be on discussions, rather than on presenting technical content only. That is, beside technical talks, there will be explicit discussion sessions, a session for presenting ideas in the form of lightning talks, as well as a tool demo session.

The intended audience comprises, on the one hand, researchers who work in the field of FOSD and, on the other hand, researchers who work in closely related fields, as mentioned above, who use concepts of FOSD and/or who can contribute ideas for FOSD. There is an overlap with the SPLC community, so SPLC’11 is a perfect venue for colocation. However, there are also differences, for instance, FOSD concentrates on the automation of product derivation and makes features explicit across the software development process.

WORKSHOP TOPICS

We are looking for contributions in the following topics:
- Programming language and tool support for FOSD
- Mapping between problem and solution space
- Formal methods and theory for FOSD
- Variability-aware analysis (e.g., type checking, testing, data flow analysis, and verification)
- Feature composition, interaction, and refactoring
- Versioning, evolution, and maintenance
- Generative programming and automatic programming
- Components, services, and models

WORKSHOP FORMAT

The workshop is scheduled for two full days and will be a highly interactive event. The workshop begins with a keynote. Then, the accepted papers are presented in sessions. We allocate for each accepted paper 15 min for presentation and 15 min for discussion. To stimulate discussions, we assign to each paper a "devil’s advocate", who is supposed to read the paper before the workshop, to prepare a set of controversial questions (typically, one to three questions), and to step into the discussion when appropriate. Additionally, we will allocate slots for discussion sessions to address issues raised during the paper presentations or other pressing issues. Finally, there will
be space for lightning talks to present early ideas and for tool demos.

**Submission**

We invite submissions 4 to 8 pages long in ACM proceedings format. The papers will be reviewed by at least three members of the program committee. The authors will be notified about acceptance before the early registration deadline of SPLC’11. Accepted papers will be posted on the website and published in the ACM Digital Library. Submissions should be uploaded via the EasyChair submission/review system using the following URL:

http://www.easychair.org/conferences/?conf=fosd11

**Important Dates:**

- **Paper submission:** June 5th, 2011 (extended)
- **Notification:** June 28th, 2011
- **Camera-ready version:** July 10th, 2011
- **Workshop:** August 21–22, 2011

**Organization**

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