FAMOOSr 2008
Workshop on FAMIX and Moose in Software Reengineering

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Abstract

The increasing amount of data available about software systems poses new challenges for re- and reverse engineering research, as the proposed approaches need to scale. In this context, concerns about meta-modeling and analysis techniques need to be augmented by technical concerns about how to reuse and how to build upon the efforts of previous research. MOOSE *is an extensive infrastructure for reverse engineering evolved for over 10 years that promotes the reuse of engineering efforts in research.* MOOSE *accommodates various types of data modeled in the* FAMIX *family of meta-models. The goal of this half-day workshop is to strengthen the community of researchers and practitioners who are working in re- and reverse engineering, by providing a forum for building future research starting from* MOOSE *and* FAMIX *as shared infrastructure.*

1 Outline

FAMOOSr is a workshop aimed at researchers and practitioners in the field of object-oriented reengineering and software analysis. The workshop is focused on how to put research ideas and results from these fields into practice using the FAMIX family of meta-models and the MOOSE[1] analysis platform.

Both FAMIX and MOOSE were initiated in the context of FAMOOS, a European research project on object-oriented frameworks [2]. In 1997 MOOSE was as a simple implementation of the FAMIX, back then a language independent meta-model for object-oriented systems. Over the past decade however, MOOSE has been used in a growing number of research projects and has evolved to become a generic environment for various reverse and reengineering activities [7]. During the same time period FAMIX has been extended to support emerging research interests such as dynamic analysis [4], evolution analysis [3], identifier analysis[5], bug tracking analysis [1] or visualization [6].

Research reaps many benefits through collaborations and tool support. For this reason MOOSE is open-source software for researchers to build and share their analysis, meta-models, and data. In this context, several research groups from different universities are actively using MOOSE as an analysis platform, or FAMIX as a meta-model: University of Bern, University of Lugano, INRIA Lille, Politehnica University of Timisoara, University of Zurich, Universit Catholique de Louvain. Recently other research groups have announced interest in using MOOSE as a platform in the near future.

2 Goals and target audience

The main goals of the workshop are as follows:

1. We aim to offer researchers that use and build infrastructures like MOOSE and FAMIX the opportunity to meet, exchange ideas, and to identify possible future collaborations.

2. We aim to facilitate interoperability of the extensions of FAMIX that have evolved at the different groups over the past ten years.

3. We seek to increase awareness of the capabilities of MOOSE and FAMIX. The target audience in this case are researchers and industry practitioners with an interest in reverse and re-engineering software systems.

[1]http://moose.unibe.ch

3 Organization

The workshop focuses on enabling discussions, rather than on being a forum for formal presentations. Thus, after a brief introduction of the participants, the workshop starts with very short and dynamic presentations (up to 7 minutes), and then it follows up with round tables and discussions.

The discussions are split into two iterations. Each iteration is concluded with each group presenting the results for the entire audience. The main reason for having two iterations is to provide an intermediary feedback for the group discussions.

One goal of the workshop is to achieve hands-on directions for further implementations, and possible future collaborations between the participants. Thus, we also encourage the participants to actively show their tools and ideas in practice by means of informal demos.

The workshop is concluded by a wrap-up discussion.

4 Submission selection

The goal of the submission selection is to guide and organize the presentations and discussions. We expect two types of contributions:

- **Experience reports** are descriptions of performed experiments, implemented tools and/or (meta-)models.
- **Position statements** describe new directions and challenges for re- and reverse engineering infrastructures.

Submissions may address issues along general themes, including but not limited to:

- Meta-models,
- Persistency and manipulation of models and meta-models,
- Visualization techniques,
- Analysis techniques: pattern matching, data mining, machine learning, or probabilistic approaches,
- Parsing back-ends,
- Mechanisms for tool composition and rapid tool prototyping,
- Reusability of research: issues related to reusing tools written by other researchers, mechanisms for making research results and tools available to the community.

The selection process favors the submissions with higher potential of spawning discussions. The accepted submissions are presented during the workshop. Each presentation lasts for maximum 7 minutes. Because the presentations need to be short and dynamic, the review process goes beyond just accepting/rejecting, and it also guides the authors to their presentation. Thus, the reviewers decide the length of the presentation, suggest the three most important points that should be touched in the presentation, and suggest questions that could be asked during the workshop.

5 Workshop proceedings

The workshop proceedings are available online at `http://moose.unibe.ch/events/famoosr2008`.

References

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