# SEEUP 2009: Workshop on Software Engineering Foundations for End-User Programming

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### **Abstract**

The goal of the SEEUP 2009 workshop is to discuss end-user programming with a specific focus on the software engineering that is required to make it a more disciplined process, while still hiding the complexities of greater discipline from the end user. The main topic is the understanding of the problems and needs of the real end users of end-user programming and a discussion of the software engineering and supporting technology that would have to be in place to address these problems and needs.

#### 1. Overview

End-user programming (EUP) describes the practice where end users write computer programs to satisfy a specific need, where the end-user programmers have not necessarily been taught how to write code in conventional programming languages. End-user programming using shell scripts and Excel spreadsheets that allow users to quickly automate tasks specific to their needs has been around for a while. However, the advent of the Internet, and the recent explosion in the availability of web technologies, has provided more ways for end users to author programs (such as JavaScript and Flash), and made it much easier for end users to share and use other people's software. From the end-user perspective the construction of these types of applications can simply be a set of drag-anddrop operations that pull together capabilities from different sources to build a desired functionality.

While there are substantial potential benefits of enduser programming, it is important to recognize the software engineering discipline that needs to be in place to enable such flexibility, and to protect against the potential problems that can arise from such flexibility. For example, end-user programming on the Web has vastly increased the use of shared code and shared data, at the risk being exposed to code and data of poor quality which might even be malicious. Businesses are more and more seeing and understanding the impact of errors in end-user programs on their businesses and would benefit from a greater discipline.

# 2. Workshop Goal

The goal of the SEEUP workshop is to discuss enduser programming with a specific focus on the software engineering that is required to make it a more disciplined process, while still shielding the end user from the complexities of greater discipline. Specifically, the intent is to understand the problems and needs of the real user in end-user programming.

The output of the workshop will be published as an effort to share the needs and problems of these real users and to suggest opportunities for software engineering research and supporting technologies to address these problems and needs while still providing the necessary discipline.

## 3. Program Committee

- Len Bass, Software Engineering Institute, USA
- Margaret Burnett, Oregon State University, USA
- Steven Clarke, Microsoft Research, UK
- Sebastian Elbaum, University of Nebraska, USA
- Martin Erwig, Oregon State University, USA
- Grace Lewis, Software Engineering Institute, USA
- Brad Myers, Carnegie Mellon University, USA
- Mary Beth Rosson, Pennsylvania State University, USA
- Gregg Rothermel, University of Nebraska, USA
- Janice Singer, National Research Council, Canada
- Dennis Smith, Software Engineering Institute, USA