Japanese Workshop on Leveraging Web2.0 Technologies in Software Development Environments (WebSDE)

Katsuhisa Maruyama  
Ritsumeikan University  
maru@cs.ritsumei.ac.jp

Makoto Matsushita  
Osaka University  
matusita@ist.osaka-u.ac.jp

Shinichiro Yamamoto  
Aichi Prefectural University  
yamamoto@ist.aichi-pu.ac.jp

Abstract

This paper briefly describes the theme and goals of the WebSDE Workshop on ASE’2006. This workshop emphasizes next-generation software development environments inspired by Web2.0 technologies and seeks to explore ways of automated support to software development in the Web2.0 era.

1. Theme and Goals

The new concept of “Web2.0” attracts increasing attention of many people in a variety of different fields. Especially, it is worth watching and investigating for researchers or practitioners on software development. Tim O’reilley showed seven principles and eight Web2.0 design patterns in his article [1]. It helps us to figure the next-generation of software. Nowadays, the web begins to be used in various kinds of tasks in software development or maintenance; therefore, the Web2.0 potentially sparks a great change on software development environments. The Web2.0 is likely to create a new fashion for automated tasks of the software development process or automated tools available for the software development support.

This workshop emphasizes next-generation software development environments inspired by Web2.0 technologies and seeks to explore ways of automated support to software development in the Web2.0 era. To avoid careless spreading of the target of the discussion, the suggested topics would be concentrated. The workshop is intended as an investigation of how future software development environments, processes, and tools should embrace Web2.0 technologies. For example, topics of interest include:

- Program analysis or test services provided on the Web. Next-generation tools should be liberated from stand-alone computers or development environments, and would be ubiquitous as Web services. The results of the analysis and testing can be obtained by using SOAP (Simple Object Access Protocol) or REST (Representational State Transfer);
- Software development processes embracing the power of the Web to harness collective intelligence. Beneficial support can be derived from a repository storing not only software artifacts (e.g., requirements specification, design diagrams, source code, test cases, and manuals) but also informal knowledge about software construction, modification, or improvement done by others in the past, which is strewn on the web;
- Tools used in an environment where users are considered casual but significant testers. For this, a mechanism or framework for real-time collection and analysis of testing results might be crucial. Dynamic deployment (configuration) might be also required;
- Software development environments utilizing a large amount of servers and storages geographically widespread in the world. A novel distributed processing of software analysis and management might be essential.

Due to time constraints with respect to discussion at the workshop, new applications software or services not supporting software development or maintenance in the Web2.0 era, such as usual Ajax or REST applications, are not regrettably treated.

One of the hopeful goals for the workshop is to bring together Japanese researchers and practitioners who are concerned with software development environments and to serve as an opportunity to exchange their technical opinions about Web2.0. Participants will present their respective sketches of future software development environments, their potential benefits, and issues to be tackled.

References