FOLKSONOMIES OF FEEDBACK: TAGGING SOURCE CODE

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ABSTRACT

This poster introduces an investigation into the effects of changing how source code in programming assignments is assessed and how the resulting feedback is generated. We investigate how source code can be annotated using folksonomy style tags as a mechanism for generating meaningful feedback for students. In this poster we introduce the project and give an overview of the results that are starting to emerge.

Keywords

Programming, Assessment, Feedback, Folksonomy, Web 2.0

1. INTRODUCTION

The teaching of programming is recognised as a difficult undertaking throughout the discipline and it is argued that good feedback is important for improving student understanding and overall achievement. It is also clear that some methods of assessing source code can generate feedback that is both ambiguous and lacking in context.

The poster introduces an investigation into how we can improve the teaching of programming by altering how assessment feedback is both generated and disseminated to students. The novel feedback system being developed utilises ideas from folksonomies, the popular Web 2.0 tagging paradigm as a method of assessing and generating feedback for students.

2. PROJECT OUTLINE

The project will focus on the identifying the degree to which folksonomies are a useful mechanism for generating feedback on student developed source code. It will further investigate what tags are used by assessors and whether or not students opt to share their feedback with peers. A plug-in has already been developed for the Eclipse Integrated Development Environment (IDE) to enable teaching staff to annotate student code with feedback tags. These tags are to be provided as part of the feedback for the assessment and are to be made available online.

A key benefit of this system is that students would be able to view their feedback tags and then be presented with the associated code fragments in the context of their project. Furthermore other fragments annotated with the same tags in the work of their peers could be displayed giving the student a wider context of their feedback.

3. RESULTS

Results will be collected using quantitative and qualitative techniques, including recording usage data from the software, questionnaires to students and assessors as well as analysis of tags and code fragments for patterns in feedback across the cohort. It is anticipated that the system will be evaluated with both level 1 introductory programming assignments and the level 2 software engineering group project. Preliminary Results are expected in May 2009 and will be included in the poster presentation.

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