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### **Summary Review: A Start-of-the-Art Survey on Software Merging**

Overall Subjective Ratings

Importance: 4.85

Writing: 5.25

The ten article reviews focused on two areas: human intervention and the categorization of merging techniques. Majority of the reviewers mentioned that Tom Mems solution to merging conflicts was by getting the user to handle these resolutions. Conflict resolution was seen by most as the responsibility of the SCM and viewed Mems's suggestion as limiting. The reviewers also stated that this was a good "summary level paper" and that the reader wanting more information on these merging techniques can refer to its citations.

Many of the reviewers reflect upon prior experiences with conflict resolutions. Majority of their prior experiences were negative in regards to merging. Because of this, the articles were more critical of Mems's discussion on this topic. For example, one reviewer stated that they did not "...like the idea of semantic merging very much" due to the semantics of the programming language itself. Other reviewers were critical of text-based merging that could lead to "false-negatives" resulting in compilation or logic errors.

Because reviewers were bringing up prior experiences, they were also raising issues surrounding SCMs they have used in the past. CVS was the application frequently mentioned due to its problematic text-based merging. Reviewers stated why certain points Mems brought up would not work in existing SCMs or previously encountered workflows. Examples brought up were change awareness, semantic merging, and conflict detection.

Majority of the articles agreed that merging is a difficult topic and that may be due to its subjective nature. A company, project team, or individual developer may have different opinions as to the definition of a merging conflict. Reviewers provided their own suggestions to these problems. One suggestion was to define the area researchers and vendors focus on to "...improve the performance of the software merging tools". Another suggestion was to use a rollback mechanism in case merging resulted in conflicts with the program's semantics.

The summaries agreed that this was a good article. However, the overall rating displays the mark of an average to slightly above average article. The tone of majority of the summaries was skeptical, at best. Majority of the reviewers disagreed with Mems's article although the article did prompt users to articulate problems they have encountered with merging and provide their own suggestions. Maybe this is the reason why the article is, as one reviewer describes it, "...an excellent survey".