

Evaluation of a Visualization Component for the Differencegraph

Firstname Lastname¹ and Firstname Lastname²

Universität Wien
Währinger Straße 29
1090 Wien

Abstract. ...

1 Introduction

Research question: Which visualization should be used for the Differencegraph?

2 Differencegraph Model and Visualization

The differencegraph concept [1] consists of two parts one is the model and the other is the visualization of this model.

Explain model and calculation, explain different markings (5)

Don't explain 3 markings.

The idea behind the visualization of the difference model is to represent each of the markings with different styles. For example each marking can be mapped to represent a specific symbol. This symbol can then be visualized on nodes and edges. To ensure an appropriate visualization is taken a survey was conducted.

3 Evaluation

To address the research question, stated in Section 1, an online survey was conducted. An online survey is well suited for this kind of research it offers a

Based on a literature research nine different styles for visualizing the difference graph were extracted. From these nine styles the best one should be found with this evaluation.

3.1 Design

3.2 Procedure

After finalizing the surveys design a two-sided pretest was conducted. In the first pretest a discussion with two people took place where the overall question and answer wording was adapted to support the users understanding. In our second pretest five people had to complete the survey and give advices what should be changed.

After the pretest the survey was executed with 73 participants from which 31 completed the survey.

3.3 Results

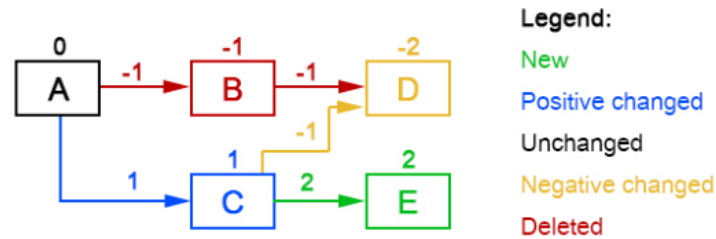


Fig. 1. Final Representation of the Differencegraph

4 Applications

Merging of processes -i Before merging two processes seeing where they differ from each other can be really good and support the merge process. For example activities which are only executed in one of the processes can be obtained easily.

Comparing two instances -i For example two factories which produce by same input the same output. Are there differences in process execution?

Evolution of a process -i Compare year 2013 and 2014, what has changed?

5 Related Work

Difference between the differencegraph concept and conformance checking?

6 Conclusion

References

1. Simone Kriglstein, Günter Wallner, and Stefanie Rinderle-Ma. A visualization approach for difference analysis of process models and instance traffic. In *Business Process Management*, volume 8094 of *Lecture Notes in Computer Science*, pages 219–226. Springer Berlin Heidelberg, 2013.