The Extension of the new Paper from Our Previous Paper in SoICT'17

April 20, 2018

1   Summary

This work is an extension of our conference paper[21] with the following new points. First, we compliment the OCL wellformedness rules for the USL abstract syntax. A graphical concrete syntax for this language is also introduced and realized in this work. Second, we present a new case study in order to illustrate how to apply this language. Third, we explain several typical transformation situations from USL models and then focus on a transformation to obtain a template-based use case description. Last but not least, we make a language evaluation of the USL.

2   Detail

We changed the title of the paper from "USL: Towards Precise Specification of Use Cases for Model-Driven Development" to "USL: A Domain-Specific Language for Precise Specification of Use Cases and Its Transformations". We also changed the title of sections and subsection and reorganized them in the new paper.

We rewrote some parts: Abstract, Introduction, Background and Motivation, Tool Support, Conclusion.

We additionally extended some contents:

- We provided the OCL wellformedness rules for the Abstract syntax of USL in Subsection *4.1*.

- We presented the graphical concrete syntax of USL in Subsection *4.2*.

- We explained several typical transformation situations from USL models and then focus on a model transformation to obtain a template-based use case description in Section *5*.

- We presented a new case study in order to illustrate how to apply this language in subsection *6.2*.

- We made a language evaluation of the USL in Subsection *6.3*.