TECHNISCHE UNIVERSITÄT DRESDEN

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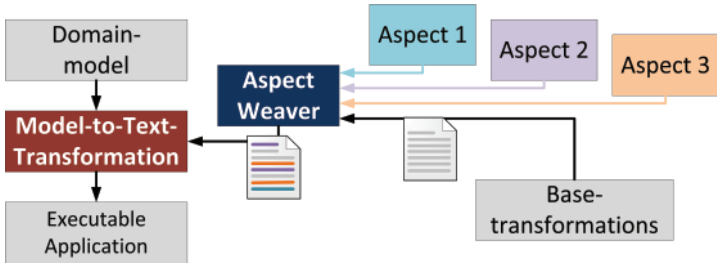
Reasearch about aspectoriented realization of Model-to-Text-transformations for user interfaces

For the adaption of existing model-to-text transformations (M2T) to new target platforms it is necessary to create new transformation rules. The motivation for this study is to replace this new to develop rules with the use of aspects. Therefore an aspect-oriented approach to create user interfaces with model-to-text transformation was developed including the examination of different frameworks for model-to-text transformation on their functionality and reliability. Aspect-oriented M2T weaves aspects into a base transformation to generate an application (see image). Based on the language selected for the study - Xpand - Models were created to describe the target platforms and to expand the aspects. With the expansion-model for aspects it is possible to select aspects depending on a given target platform. With these aspects the model-to-text transformation is able to generate an application that is well suited to the platform.



How the aspects can be integrated into the given transformations and what changes in the basic templates are necessary to provide appropriate Joinpoints for aspect-weaver was researched during a descriptive case study. Adjusting the application to two target platforms with aspects showed the potential of the developed solution. Besides there was an insight about what adjustments, beyond the developments of this work, are necessary to achive an optimal adaptation of the application to the full conditions of use.

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