

Domain specific visual languages are very popular in the software engineering process, because they support the understanding of the development process with visual metaphors. Structure editors for such languages can be generated from specifications at a high level of abstraction. The generated editors are mostly static, that is they cannot visualize the execution semantics of the underlying visual language.

The purpose of my work was to extend the generator framework DEViL with support for simulation and animation in the generated structure editors. I have developed a special language that allows to specify tailored simulation structures and an event-driven behaviour implementation. From a standardized and narrow interface – the simulation modification actions – a default animation can automatically be derived. This animation can be adapted by means of a so called animation pattern library. The specific characteristic in my approach is, besides the graphical interpolation to generate animation, the reuse of well-known and proven specification concepts in DEViL. Hence, a language designer can easily extend a visual language with simulation and animation capabilities.