Generative Technologies for Model Animation in the TopCased Platform

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Abstract

Domain Specific Modeling Languages (DSML) are more and more used to handle high level concepts, and thus bring complex software development under control. The increasingly recurring definition of new languages raises the problem of the definition of support tools such as editor, simulator, compiler, etc. In this paper we propose generative technologies that have been designed to ease the development of model animation tools inside the TopCased platform. These tools rely on the automatically generated graphical editors of TopCased and provide additional generators for building model animator graphical interface. We also rely on an architecture for executable metamodel (i.e., the TopCased model execution metamodeling pattern) to bind the behavioral semantics of the modeling language. These tools were designed in a pragmatic manner by abstracting the various model animators that had been hand-coded in the TopCased project, and then validated by refactoring these animators.

Keywords

Generative technologies Model animation Model execution Metamodeling pattern

Preview

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