Adapting Modeling Environments to Domain Specific Interactions

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Introduction:
Although dedicated modeling environments can be generated from DSMLs, no adaptation of the user interface is required. The main goal of this research is to explicitly include the user interaction in the specification of DSML tools, so that they can be customized for the user.

Interaction Streams:
Logical spaces of fundamentally different forms of taking or providing information to a user. Ex. VR, AR, touch screens...

Interface Layers:
Logical aggregations of the representations of interaction elements into reusable components. Ex. toolbars, controllers, menus...

Interactions:
Atomic descriptions of pre and post conditions of interactions.
Preconditions are defined as interface and concrete syntax symbols at the beginning of the sequence.
Postconditions are defined after any number of required steps.

Additional Information:
Just the pre and post conditions of interactions is not enough to go from conceptual description to deployment.

Statecharts:
Semantic construction of the interaction descriptions.

Statechart Refinement:
Merge of all component semantics of a specific interaction (1) is made. This is done with use of statechart refinement [4].

Conclusion:
With this work we open the development process of DSML environments to include user experience (UX) knowledge and in this way further increase the adaptability and reach of DSML approaches.

References: