Flexible Modeling

Summary / Zusammenfassung
Requirements engineers and stakeholders often use classic whiteboards to elicit and model requirements. Sketching fosters creativity and can also be applied by stakeholders who do not master a modeling language with a formal syntax. However, the power and ease of sketching comes at the expense of a media break, i.e., of later having to re-create the sketched models from scratch in a modeling tool in order to be able to manage requirements properly. This re-creation process is time consuming, error-prone, and can lead to a loss of information.

Sketch recognition tools have been created to relieve the task of converting sketches into models. However, such tools rely on predefined notations, so that the user needs to know the underlying modeling language and is restricted to its vocabulary.

The goal of our research is to unite the flexibility of unconstrained sketching with the power of (semi-)formal modeling, and therefore eliminating media breaks. We explore how free-form sketches can be incrementally transformed into semi-formal models in an interactive way.

We are developing the FlexiSketch tool, which implements all those concepts, combining free-form sketching with lightweight medamodeling by example and supporting collaborative work.

Recently, we also have started looking into flexible visualization mechanisms of sketched content on small screens.

Publications / Publikationen


Conference (RE’11), Trento, Italy.

Keywords / Suchbegriffe
Sketching, Modeling, Metamodelling, Requirements Engineering, domain specific modeling languages

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