

Lightweight and Flexible Requirements Modeling

RE2 Group 2

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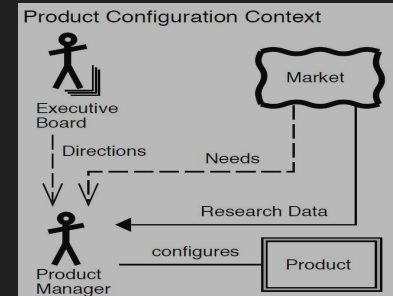
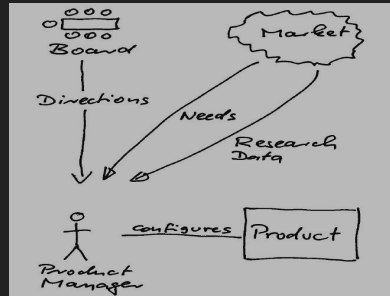
Overview

- Idea
 - Tool & Research
 - Conclusion
 - Discussion
-
- Papers
 - Very Lightweight Requirements Modeling (VLML) - Glinz 2010
 - FlexiSketch - Wüest 2012
 - FlexiSketch Team - Wüest 2015

Idea

Very Lightweight Modeling Language (VLML)

- Majority of Requirements Specification in natural language
- UML not used industrial requirements engineers
- Early-stage Requirements are mainly narrative and pictorial
- Problem: Text and pictures are unstructured and informal
- VLML structures natural language specification and abstracts
- VLML allows simple modeling
 - Structure
 - Relationships
 - Influence
 - Flow



Situation

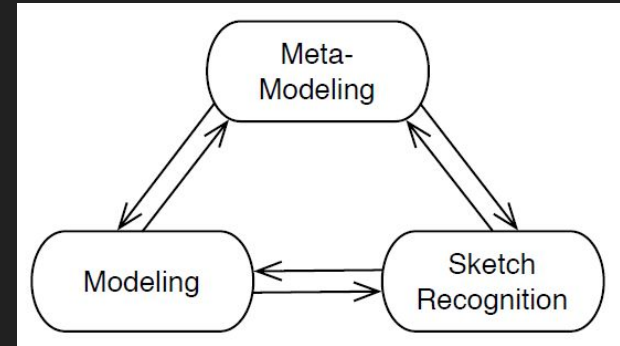
- Paper / Whiteboard / Flip Chart
 - available anywhere
 - instantly ready
 - easy to use
 - fast
 - allow informal, unrestricted sketches
- Modeling requires use of modeling language and syntax
- Need to re-model paper documentation manually



 **lightweight software tools from the beginning**

FlexiSketch

- Multi-touch mobile application
- Supports freeform sketching
- Assignment of syntax and semantics to sketched elements
- Transformation of sketches into semi-formal models



FlexiSketch: Results

- Users are able to draw use case diagrams
- Resulting diagrams are well readable
- Freeform sketching is good
- Practitioners willing to use
- Improvements needed
- Need to allow for collaboration

 Next Generation

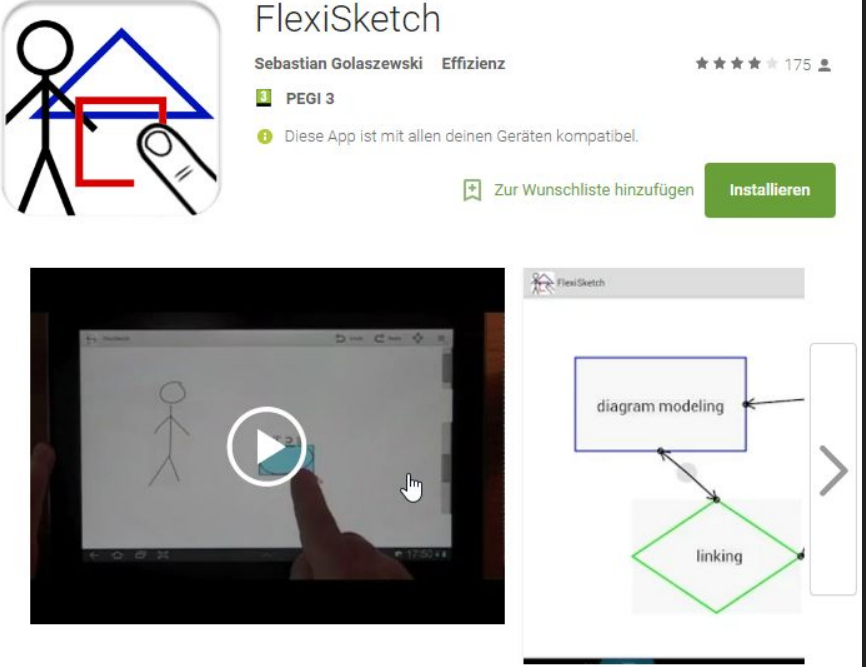
Final Tool and Research

Design Goals

- Foster active participation
 - All participants concurrently sketch and define notations
- Prevent conflicting inputs
- Shared and private views
- Results immediately available
- Awareness of each other's actions

Look at Tool

- Several Generations
- Only for tablet mobile
- Beta Version (Proof of Concept)
- Research project



The image displays the Google Play Store listing for the FlexiSketch app and a screenshot of the app's output. The app listing includes the icon, name, developer, category, age rating, compatibility, and an install button. The screenshot shows a hand-drawn diagram on a tablet screen with a play button overlay, and a separate view of the completed diagram.

FlexiSketch
Sebastian Golaszewski Effizienz
PEGI 3
Diese App ist mit allen deinen Geräten kompatibel.
Zur Wunschliste hinzufügen **Installieren**

The screenshot shows a hand-drawn diagram on a tablet screen. The diagram consists of a stick figure, a blue triangle, and a red rectangle. A play button is overlaid on the screen. Below the screenshot, a completed diagram is shown, featuring a box labeled "diagram modeling" and a diamond labeled "linking", connected by arrows.

Feedback

Neueste ▾ Alle Geräte ▾



Matthias Stanke 23. September 2016
★★★★★
Wir nicht mehr weiter entwickelt. Eigentlich 4*. Idee gut, aber leider nicht zu Ende gebracht - schade.



Jin Fizz 10. Juli 2014
★★★★★
Die App ist perfekt. Einzig ein Radiergummi, um zu klein geratene Fehlstreiche wegzubekommen fehlt noch.



Mario Mravik 3. Februar 2014
★★★★★
Erster Crash nach 30 Sekunden



towi Torsten Will 10. Januar 2014
★★★★★
Einfach und gut Ziemlich gut, nicht überladen. Ich vermisse einen Export in ein nicht-verlustbehaftetes format wie PNG, lieber noch svg, PDF oder EPS. Da dann am besten per sharing (mail, dropbox, etc.)

BEWERTUNGEN

3,9

★★★★★

175 insgesamt



Nützlichkeit ▾ Alle Geräte ▾

Bewertungen von Nutzern



tobias r. 9. März 2013
★★★★★
Hi potential Really nice. However all functions shown in the video are not available. The button in the very right corner next to the zoom function enabling button is missing. More arrow shapes would be helpful (uml) also the option to add text to the beginning and end of a arrow would be nice. It feels like it takes a time until it remembers the shapes I defined. However I am impressed of the functionality of this small sized app. Great



Sebastian Golaszewski 2. Mai 2013
Thank you for the detailed feedback! About the missing button: Some devices automatically map the menu button of an App to the standard menu button at the bottom of the device (for the Galaxy Note, it's to the left of the hardware home button).



Ein Google-Nutzer 2. August 2012
★★★★★
Bin begeistert Läuft klasse auf A510. Dankel Was ich noch nicht gefunden habe: Wie kann man mehrere kleine und dicht nebeneinander liegende Objekte gleichzeitig selektieren, um sie dann zu einem Objekt zusammen zu führen?



towi Torsten Will 10. Januar 2014
★★★★★
Einfach und gut Ziemlich gut, nicht überladen. Ich vermisse einen Export in ein nicht-verlustbehaftetes format wie PNG, lieber noch svg, PDF oder EPS. Da dann am besten per sharing (mail, dropbox, etc.)



Ulrich Hoffmann 15. Januar 2013
★★★★★
Great Exactly what I needed. Perfect for quickly sketching Diagramm or even just note and illustrate something. Even it is great the was it is, hopefully the development will go on.

Conclusion

Advantages

- Allows quick development of conventions and hierarchy
- Incremental development of common language/understanding
- Tool fosters cooperation
- Less formal thus easy to access
- Inclusion of non UML/Adora savvy professionals

Disadvantages/Weaknesses

- Tests run on a few test users
- Conventions and concepts need to be taught/agreed
- No standard/ less likely to scale

Coexistence

- Faster development of initial concepts and prototypes
- Pre-Modelling with stakeholders

Discussion

Questions



Our Questions

- What is the current state?
- Which advantages do you see in using Very Lightweight Requirements Modeling compared to UML/Adora?
- What would you use in a project?