

SketchWizard: Wizard of Oz Prototyping of Pen-Based User Interfaces

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ABSTRACT

ACM Classification:

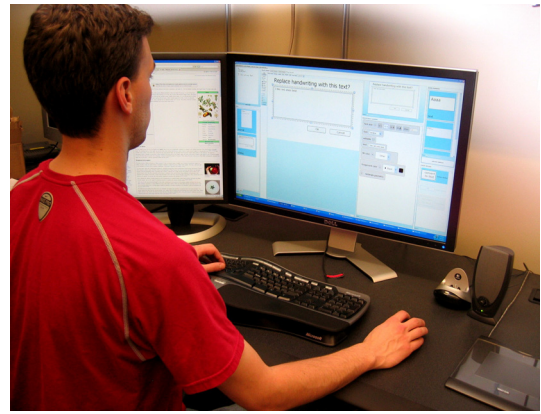
General terms:

Keywords:

INTRODUCTION



(a)



(b)

Figure 1: Wizard of Oz test setup. (a) A designer observing a user interacting with a pen-based user interface. (b) Another designer operating the interface behind the scenes with SketchWizard.

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Input and output language evaluation

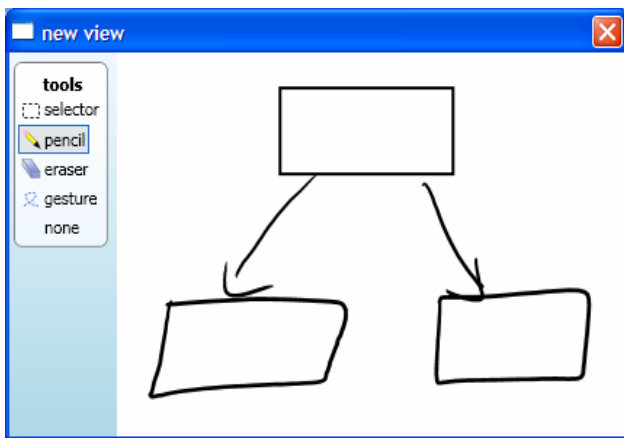
Whole-system evaluation

PEN-BASED INTERFACE DESIGN WITH WIZARD OF OZ

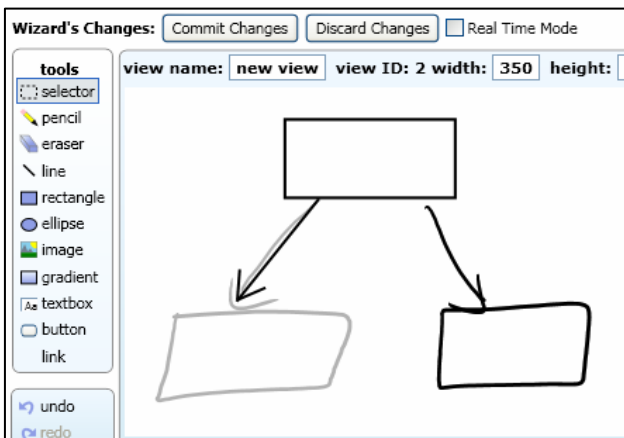
SKETCHWIZARD DESIGN AND IMPLEMENTATION

Input language evaluation.

Commit Changes



(a)



(b)

Figure 2: User's view (a) and wizard's view (b) of the shared drawing canvas in SketchWizard. The wizard has deleted a box and arrow and replaced the arrow with a beautified version. Updates appear to the user when the wizard presses the **Commit Changes** button.

Wizard's Workspace

editable

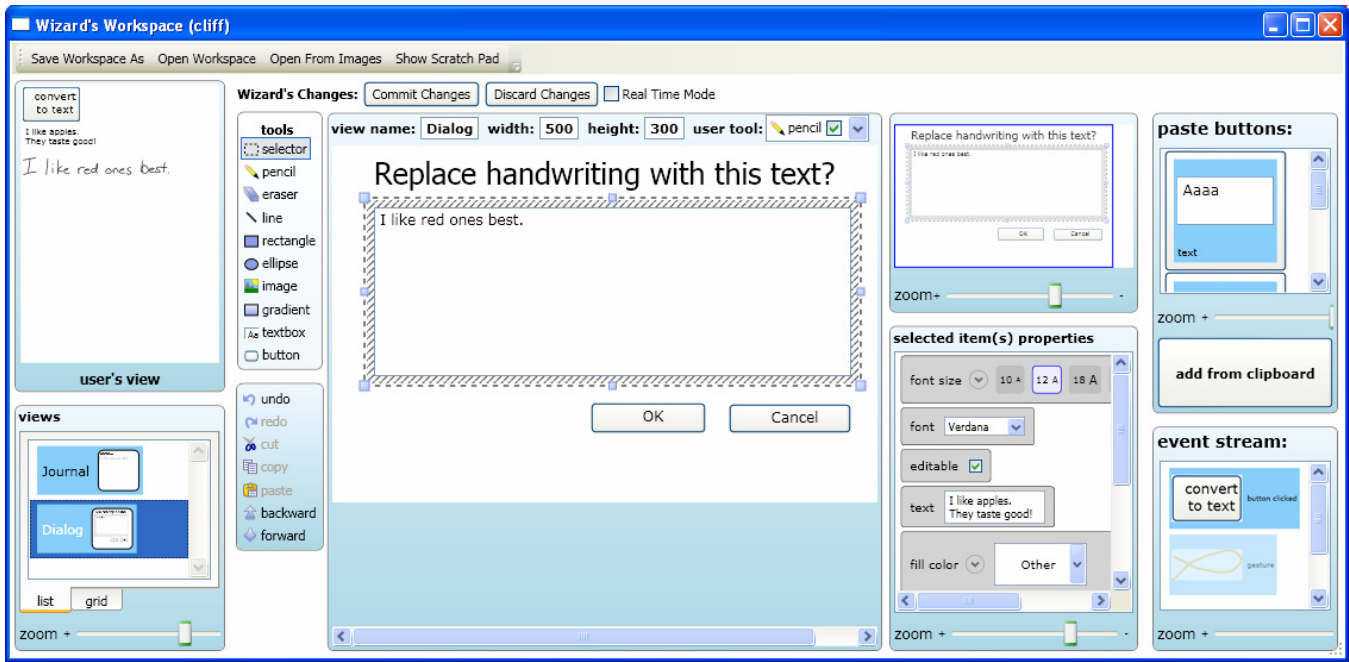


Figure 3: SketchWizard Wizard's Workspace: (Top left) Scaled-down User's View. (Bottom left) List of views that the wizard can edit and show to the user. (Center) Main drawing canvas. (Top right of center) Radar view of the main drawing canvas. (Bottom right of center) Editable properties of selected objects. (Top right) Paste buttons. (Bottom right) Event stream.

List of Views.

Add from clipboard

Scratch Pad.

Event Stream.

Session Player

Paste Buttons.

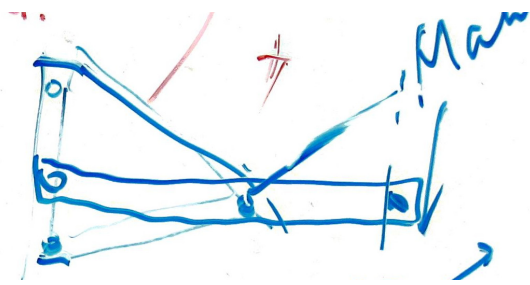
tools

Input Language Evaluation

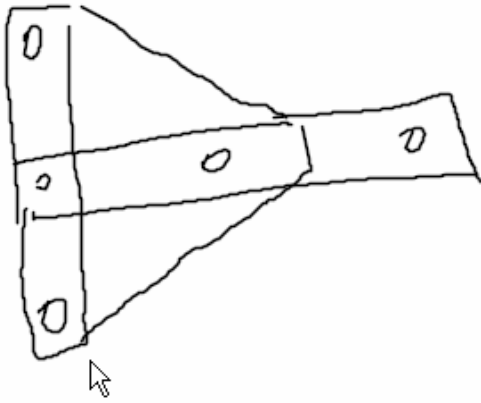
Implementation Details and Limitations

SKETCHWIZARD FEASIBILITY STUDY

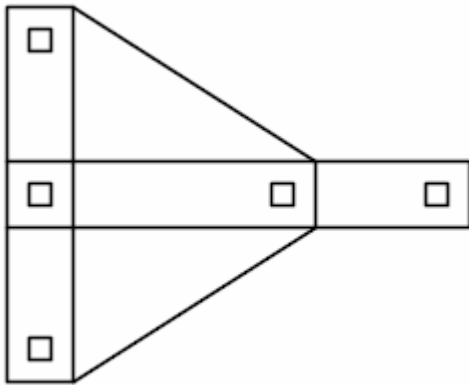
Input and Output Language Evaluation



(a)



(b)



(c)

SKETCHWIZARD LABORATORY EVALUATION

Procedure

Figure 4: User data from input and output language evaluation. (a) Original sketch. (b) Redrawn sketch. (c) Beautified figure.

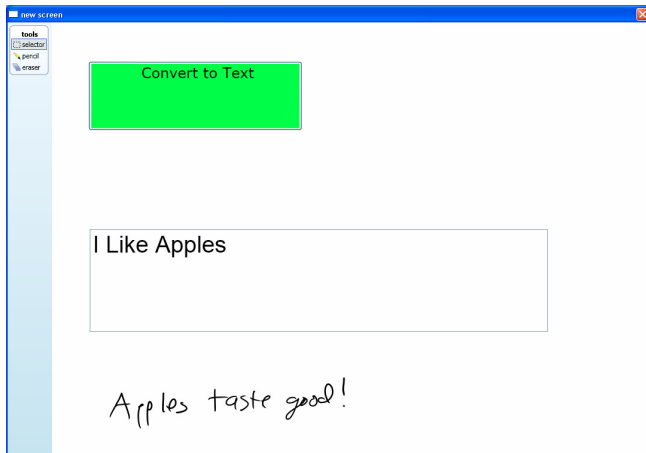
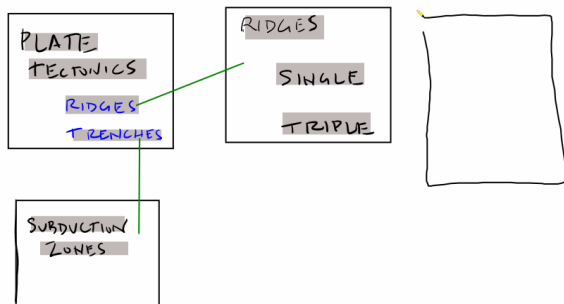


Figure 5: User's View during a study session in which a designer participant simulates Windows Journal.

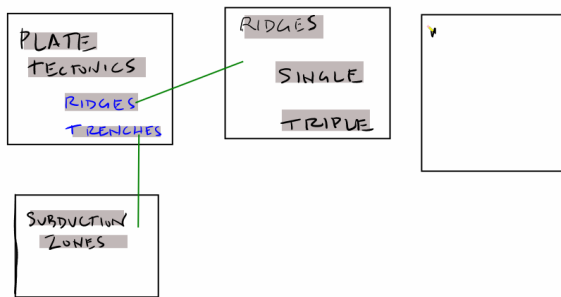
Results



(a)

Convert to Text

recognize



(b)

Figure 6: Recorded data from an end-user participant in our laboratory evaluation, showing before (a) and after (b) recognition of a sketched rectangle representing a web page.

Wizard of Oz Prototyping Tools

RELATED WORK

Paper Prototyping

CONCLUSIONS AND FUTURE WORK

ACKNOWLEDGMENTS

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The Art of Human-Computer Interface

Design