Rapid Pen-Centric Authoring of Improvisational Visualizations with NapkinVis



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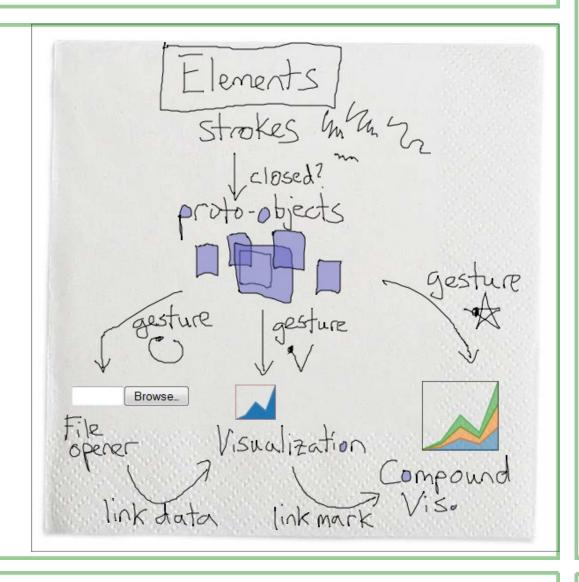
Michiel van de Panne University of British Columbia

Motivations

- Create visualizations without code
- Approach toolkit flexibility
- Adapt to current sketch and gesture devices

Overview

 The elements of NapkinVis, drawn in the NapkinVis interface

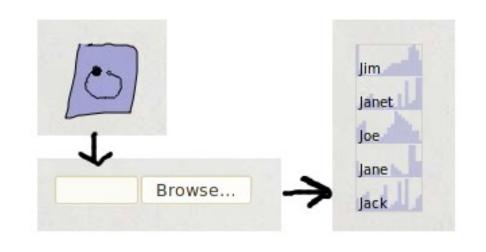


How to Use

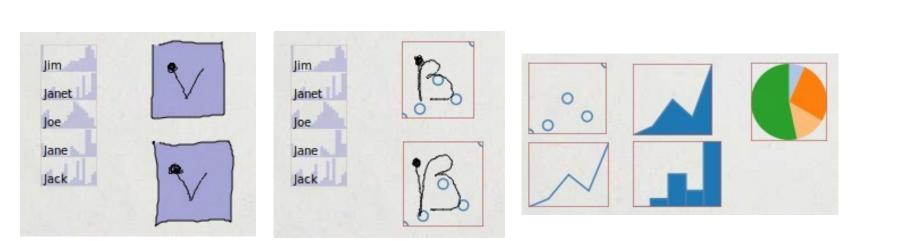
1. draw



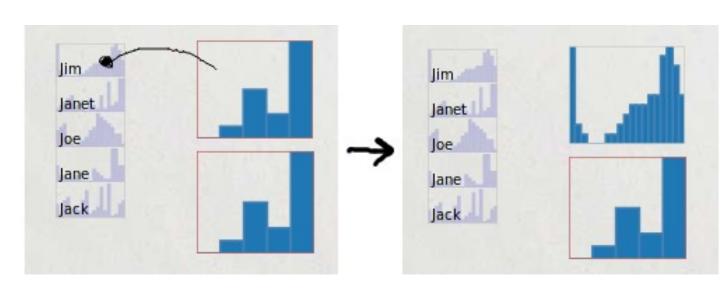
2. import data



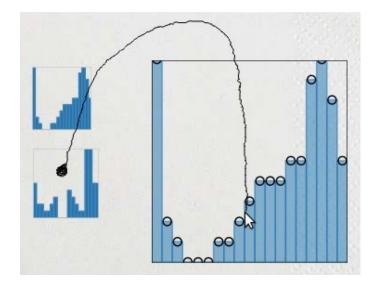
3. pick marks

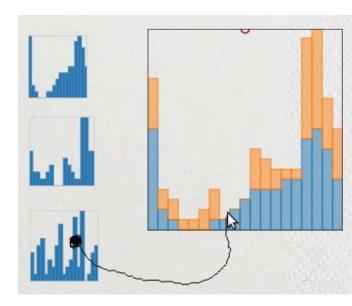


4. link data



5. combine marks





Implementation

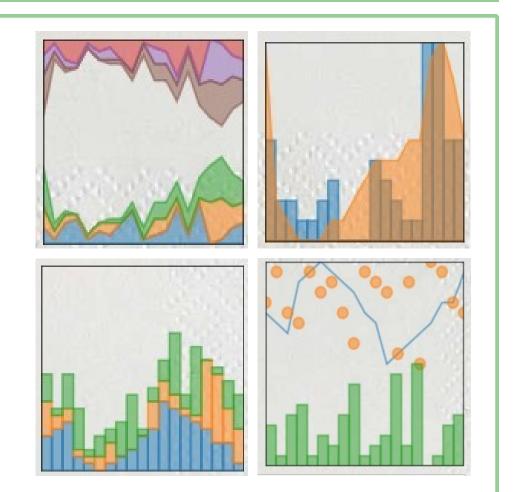
- Sketch and gesture based
- Front end to Protovis
- Web application
- Anchors used to position marks
- Authored visualizations can be reused

Future Work

- Support more Protovis functionality
- Support more data formats
- Add formatting such as tick marks, automatic labels, and more
- Explore more advanced sketch-based interactions

Examples

 A few examples of visualizations created with NapkinVis



This work was supported in part by:



