Toolkits & Infrastructures

- Set of components or capabilities that allow others to put together visualization systems

- Growing trend
The InfoVis Toolkit

http://ivtk.sourceforge.net

Characteristics

• Coherent software architecture and set of Java components
  – Data structure is a table
  – Views: time series, parallel coordinates, scatterplots, node-link diagrams, treemaps
  – Added capabilities in color management, labeling, dynamic queries, ...

Summer term 2008
Critique

• Primarily limited to views it provides, but good & powerful support for them
• Documentation?
Characteristics

• Fine-grained building blocks for constructing visualizations (as opposed to pre-made views)
• Data model is a graph (entities & relations)
• Includes library of layout algorithms, navigation and interaction techniques
• Written in Java2d
• Follows CMS vis process model
Applications

- Degree of Interest Trees (AVI ’04)
- Vizster (InfoVis ’05)

Critique

- Appears to be very powerful framework
- How challenging is it to develop new applications?
- See paper at InfoVis’06: Software Design Patterns for Information Visualization
Flare

http://flare.prefuse.org/

Characteristics

• collection of ActionScript 3 classes for building a wide variety of interactive visualizations
• can be used to build visualizations that run on the web in the Adobe Flash Player
• Tutorial available
Piccolo

[Image showing a graphical user interface]

http://www.cs.umd.edu/hcil/piccolo/

Characteristics

• Graphics toolkit for Java and C# with built-in zooming and panning support