Abstract

With availability of enough visualization techniques it can be very confusing to know what and when should be appropriate technique to use in order to convey maximum possible understanding. The basic purpose of visual representation is to efficiently interpret what is insight, as easy as possible. Different available visualization techniques are use for different
situation which convey different level of understanding. This document is guide for the young researchers who wants to start work in visualization. The purpose of this piece of document is to collect all visualization techniques with their brief introduction. This paper deals with many definitions and aspects of visualization, how visualization take place i.e. different steps of visualization process, problems that are confront in visualization, categorization of visualization techniques on the bases of distinct perspective, typically known common data and information visualization techniques, basic interactive methods for visualization their advantages and disadvantages, interactivity process, and the scope of visualization up to some extent in different field of research.

Reference

- Chris North, “Information Visualization”, Center for Human-Computer Interaction, Department of Computer Science Virginia Polytechnic Institute and State University Blacksburg, VA 24061 USA
- Beatriz Sousa Santos, “Evaluating Visualization techniques and tools: what are the main issues?”.
- WebSter Dictionary: www.webster-dictionary.org/definition/visualization
WebSter Dictionary: www.webster-dictionary.org/definition/aesthetic
- Smashing Magazine:
e-1/#comment-559828
- Adobe Flex, Advanced Data Visualization Developer Guide
www.neoformix.com/2006/MultiLevelPieChart.html
- Online Microsoft Excel Help:
- What is Scatter plot? www.psychwiki.com/wiki/What_is_a_scatterplot%3F
  www.juiceanalytics.com/writing/parallel-coordinates/
- Shneiderman, Ben; Plaisant, Catherine (2009). "Treemaps for space-constrained visualization of hierarchies".
- IBM Research and the IBM Cognos software group,
  www-958.ibm.com/software/data/cognos/manyeyes/page/Treemap.html
  Palgrave
- Usability First: www.usabilityfirst.com/glossary/cone-tree/
- Search CIO Mid market: http://searchcio-midmarket.techtarget.com/definition/timeline,
  http://searchcio-midmarket.techtarget.com/definition/Venn-diagram
- Student Guide to Timeline: www.lkwdpl.org/study/timeline/
- Flow Breeze: Flowcharting and Process Diagramming Tools,
  www.breezetree.com/articles/what-is-a-flow-chart.htm
- Generating of Marketing insight, Semantic networks:
  www.duke.edu/~mccann/mwb/15semnet.htm

Index Terms

Computer Science Information Sciences

Key words

Visualization Categorization Visualization Challenges
Information Visualization
Data Visualization
Visualization Interactivity