Fall 2011 - LP2

Course Assignments for

Information Visualization 4DV300 – Fall 11

2nd assignment Deadline for this assignment is Dec 9, 2011.

Task 1 Answer the questions

Answer the following questions:

- 1. Explain in detail the InfoVis Reference Model. What are the strengths of this model?
- 2. What kind of interactions are supported by Range Sliders? Is there a way to improve them in order to show more information? Make a short list of pros and cons.
- 3. In most of the visualization systems selecting or highlighting a data object in a specific view leads to a highlight in another view. What is this interaction technique called? What are its advantages?
- 4. What is the difference between Overview + Details and Focus + Context? Try to describe pros and cons of each approach.
- 5. What is the difference between the Graphic Fisheye and Logic Fisheye views? Can they be combined? If yes, how (an example perhaps)?
- 6. What are Polyfocal Displays? What are they used for? Draw the transformation function for Polyfocal Displays.
- 7. Describe the idea behind Hyperbolic Spaces. Describe the possible interactions in Hyperbolic Trees.

Task 2 Implementing a scatter plot

Your task is to implement a scatter plot visualization. You can use whatever programming language you want, however a runnable application should be provided together with a source code and a short readme.txt file with the instructions on how to run the program. Your application should be able to load and visualize similar data such as the one found here:

http://cs.lnu.se/isovis/courses/fall11/4dv300/assignments/data.csv

The scatter plot axes range should be normalized automatically based on the data values presented on the file.

Please put all files in an archive (.zip) and upload it in Blackboard by the given deadline!