Linnæus University

Fall 2012 – LP2

## Course Assignments for

## Information Visualization 4DV300 – Fall 12

2nd assignment Deadline for this assignment is Nov 28, 2012.

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. 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? visualization!
- 3. What is the difference between Overview + Details and Focus + Context? Try to describe pros and cons of each approach.
- 4. What is the difference between the Graphic Fisheye and Logic Fisheye views? Can they be combined? If yes, how (an example perhaps)?
- 5. What are Polyfocal Displays? What are they used for? Draw the transformation function for Polyfocal Displays.

## 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 (executable)** 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 in the Blackboard and here:

http://cs.lnu.se/isovis/courses/fall12/4dv300/assignments/data.csv

The scatter plot axes range should be normalized automatically based on the data values presented on the file. There is one attribute of categorical nature. You might want to use color or shape to distinguish such attributes. Do you notice something interesting regarding this dataset?

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