



Course Assignments
for
Applied Information Visualization
4DV301 – Spring 11

1st assignment

Deadline for this assignment is Apr 21, 2011.

Task 1 *Visualize the data*

You should choose two axis-based approaches to visualize a multivariate dataset. Your task is to draw the visualization **manually** and explain the approaches and their interaction design in detail. (For example: "The red dot signifies the x data object and the size shows its y value.")

Player	2006-07	2007-08	2008-09	2009-10	2010-11
Messi	17	16	38	47	45
Ronaldo	23	42	26	33	37
Eto'o	27	28	52	47	41
Rooney	23	18	20	34	12
Ibrahimovic	15	22	29	21	20
van Persie	8	5	14	8	5

Task 2 *Conceptual Design*

Your 2nd task is to design a visualization tool for a time-dependent, multivariate data set (you are encouraged to work in groups of two students). You have to make a conceptual design, which means that you do not need to implement the visualization at this point. You should simply draw a visualization and illustrate interaction ideas on a paper (you can use software tools for drawing if you like).

Before you begin to create your visualization, think about the data set and what would people like to do with it. What would one want to know, how can he/she find specific information, what other tasks would one like to perform with the data? Your visualization should help users in performing these tasks. Therefore, you should select what would be the most convenient visualization and interaction techniques to support those tasks.

You should submit a report with detailed images of your visualization and an explanation about it. You should explain how the user is able to perform various tasks (your visualization should support at least two tasks, such as browsing, comparison etc). Also, we would like to have your opinion about the advantages and disadvantages of your design. You should also implement a parser for the dataset (given in CSV format). Write a test program (JAVA) for your **parser** that will print out the complete dataset. However, you are not encouraged to implement the visualization part, since you have to get approval if your conceptual design meets the requirements. The dataset is comprised of different statistical data about health care resources for different countries in a period of around 10 years. There are some missing information so the tool should handle them accordingly.

Dataset:

http://cs.lnu.se/isovis/courses/spring11/4dv301/assignments/health_data.csv

Dataset legend: http://cs.lnu.se/isovis/courses/spring11/4dv301/assignments/data_legend.csv

For an overview about the dataset check (navigate to the "*Browse Themes/ Health OECD Health Data 2010 - Selected Data / Health care resources*"):

<http://stats.oecd.org/Index.aspx?DataSetCode=CSP2009>

Please prepare a report with your results and submit it to Blackboard by the given deadline!

Note: Include the course code in the email subject field (4DV301) in case you have inquiries about the assignment.