
Course Assignments
for
Advanced Information Visualization and Applications
4DV806 – Fall 2020

Assignment 1

Deadline for this assignment is November 16, 2020 at 23:55.

Task 1 *Visualize a Data Set*

This **implementation** task is to develop a program for visualizing a data set. Note that you are not allowed to modify the format or the contents of the provided data set file! You can download it from Moodle or via the following URL:

Data set:

<http://cs.lnu.se/isovis/courses/fall20/4dv806/assignments/BillionDollars.json>

(1) Take a look at the data, find out what the data is about, think of a good way to visualize the complete data set (e.g., treemap), and implement it. (2) In addition you should discuss what interaction possibilities would make sense and why, based on the available attributes in the data set.

You can use any programming language and library of your choice to visualize the data sets (JavaScript and D3.js for instance, <http://d3js.org>). Please note that this task requires programming rather than usage of existing visualization tools or environments such as Tableau.

Task 2 *Review a Visual Analytics Tool*

This **non-implementation** task is to read a research article about a visual analytics tool uVSAT developed by our group, try it out yourselves, and write a short review. You should start by reading our article at <http://journals.sagepub.com/doi/10.1177/1473871615575079> uVSAT is available at <https://sheldon.lnu.se/uvsat/>, password: *seminar*.

You should try to load the data (please select the data in the time range not earlier than January 2015 and not later than February 2018) and investigate the available visual representations and interactions. Write a report with your review. Try to think about the pros and cons of this tool (please motivate your statements!).

Prepare a short report (2–4 pages, A4, 12pt) and a presentation (5–10 minutes). You will have to present your solution after the deadline.

Please prepare a ZIP archive with your report (PDF) and implementation, and upload it to Moodle by the given deadline! If you have questions, you can contact Angelos Chatzimparmpas via email (angelos.chatzimparmpas@lnu.se). You will have to present your work on November 17, 15:00–16:45 via Zoom.

Please note: any kind of plagiarism is not acceptable!