Data Visualization

EXAM

Tea Tušar, Data Science and Scientific Computing, Information retrieval and data visualization

Exam

Groups of 3 students design and present visualizations of some data

The presentation should not take more than 15 minutes

Be prepared to answer questions about the tasks your visualization is addressing, your design choices and possible alternatives

Showcase what you have learned

Less in more

Use any software/tool

Topic

Choose a topic you are interested in from

- O Collection of public data sources on Moodle
- Your own data

Find the data and three interesting questions about the topic

Produce visualizations that answer those questions

- o Generally, one visualization per question
- For each visualization, list the mapping between data attributes and their corresponding visual channels (NEW!)

Present the results

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Presentation

Structure of the presentation

- Topic and data introduction
- Addressed questions
- Visualizations and findings about the data, answers to the questions, for each visualization the mapping between data attributes and visual channels
- o Individual contributions of the students in the group

Grading

Graded aspects (make sure you pay attention to all of them)

- Visualization
 - Pose clear questions and answer them with the visualizations
 - Showcase what you have learned (appropriate choice of representation and color, avoid lying, maximize accessibility, minimize clutter, use annotation, cite the source of data, ...)
- Presentation
 - Follow the proposed structure (including the individual contributions)
 - Make sure there are no typos
 - Respect the allocated time

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Common mistakes

Too many visualizations (presentation too long)

Choice of colors/fonts/font sizes not consistent

Individual items not aligned well

Not enough attention to details

Bad titles

Individual contributions not listed

Data source not listed for each visualization

Advice: Validate the visualizations among yourselves

Deadlines

Provide the visualizations and presentation slides (post them to the Exam channel on Teams) one week before the exam (hard deadline!)

Presentations during a call at the exam date

I will give several possible dates – you can also propose them

Communication regarding the deadlines by email or Teams

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Improve your grades

If you are not happy with your grades, you can improve them!

- Ask for a list of things to improve
- Provide new visualizations and presentation
- o Get a new grade

Communication regarding the improvements by email or Teams

Example

Visualizations using movie data from IMDb.com