University of Warsaw
Faculty of Mathematics, Informatics and Mechanics

Data analysis and visualization (DAV)

THE PROJECT

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Project

The project will be done by groups (two persons) – you should email me the team members until 14.04.2024 (email subject: DAV24_project_members) – if you will not do that the team members will be assigned randomly during next classes

The subject will be related to ...

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The subject will be related to COVID-19 analysis

Task: you will need to prepare a presentation* about COVID-19 in some country**

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Note that the epidemic is in decline, thus this may affect the prediction of future trends, thus you can divide the data into to 2 periods (e.g. 2020-2022, 2020-2024) and compare the trends

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Task: you will need to prepare a presentation* about COVID-19 in some country**

* Two versions must be prepared:
- pdf (poster of A0 size, but with enough size and resolution of the plots to print it in A4 format)
- html (should contain animation, interactive plots, etc.)

** Each group can choose the country of interest except Poland (the data for Poland can be used extensively for comparison e.g. COVID-19 in Germany vs. COVID-19 in Poland) – the faster you will book the country the bigger chance you will get it (only one group will analyze given country thus if already some group booked it earlier, you will be asked to change your proposition)

Project

Task: prepare a presentation about COVID-19 in some country

You need to find the data by yourself (this is part of the job). For the starting point you can use Wikipedia and Worldometers websites e.g.:

https://en.wikipedia.org/wiki/COVID-19_pandemic_by_country_and_territory

https://en.wikipedia.org/wiki/Category:COVID-19_pandemic_by_country

https://en.wikipedia.org/wiki/Portal:COVID-19

https://www.worldometers.info/coronavirus/country/italy/

Additional information about possible data sources you can find in:

https://www.mimuw.edu.pl/~lukaskoz/teaching/dav/projects/

Remember: it is up to you to find as much data as possible

The data and python script for each plot need to be provided together with the project. No data or script means that given plot will be not assessed.

Project

Task: prepare a presentation about COVID-19 in some country

PDF version:

- in form of the poster in PDF (format A0)

For making poster you can use latex, powerpoint or any other software. The poster can have fewer number of plots than html version (or different versions of the ones presented in html).

All plots (and its elements should be visible after printing it it in A4 format)

The poster should have form of info-graphics (the more plots and the less text the better). On the other site you are not limited to present only plots. You can add pictures and text .You can mention/analyze not only the number of the cases, but you can add interesting economics analyses/prognosis, biological facts, etc. Additionally, you can compare the data to Poland or include global-wide analyses/plots.

Project

Task: prepare a presentation about COVID-19 in some country

HTML version part:

- in form of the HTML (the content should be adjusted to fit reasonable monitor resolution – range from 1024x768 to 1920x1200)

The html version can have many more plots than pdf version. The presentation can contain animated and interactive plots.

Project

Task: prepare a presentation about COVID-19 in some country

The project should contain:

- plots based summary statistics

- plots based inferential statistics (regression, prediction of trends, etc.*)

** during presentation you should explain and justify why you did the inference as presented (the correctness of the prediction you present will have no influence on the grade until you can motive reasonable your choice)*

Project

Task: prepare a presentation about COVID-19 in some country

Preparation:

The project directory (named covid19_Country e.g. covid19_Country) should contain (at least):
- the data and the scripts for all plots (data and scripts subfolders)
- pdf and html version of final presentation
- README (short description of the project, some extra information if needed)

Should be sent not later than 48h before presentation date (email subject: 'DAV24_project_Country' where Country is replaced by Germany, Poland, etc.). I will upload them online to:

https://www.mimuw.edu.pl/~lukaskoz/teaching/dav/projects/

From there everyone can download for instance PDF version or move back to some plots if needed

Project

Task: prepare a presentation about COVID-19 in some country

Assessment:

During last 2-3 lectures (Monday, 2:15 pm starting from the end of May) you will be asked to present the project in front of the class. HTML version will be presented by group member(s)* on the projector (or online via zoom if necessary).

Time: 10 min for presentation + 5 min for questions from audience

You will use HTML version as the basis (the content should be adjusted to fit reasonable monitor resolution – range from 1024x768 to 1920x1200)

The html version can have many more plots than pdf version. The presentation can(should) contain animated and interactive plots.

After presentation there will be short discussion ~5 min (all class members will be able to say what they liked, suggest possible improvements or point to drawback of the project)

Project

Task: prepare a presentation about COVID-19 in some country

Assessment:

The final grade (max 100% for the project part, 50% of the final grade) will be given after presentation by all teams

Additionally, you can earn extra points (15%) if any of the plots from the project will be submitted and accepted in English/National version of Wikipedia. You can start from already existing plot (but then for 7.5%)*

** The plot must be submitted by the registered user (preferred login NameSurname). Additionally, the plot cannot be deleted by Wikipedia admins within next few weeks (so no spamming).*

The order of presenting will be randomly chosen (unless some groups will step forward for presenting, we will try 4-6 groups per week).

Thank you for your time
and
See you at the next lecture

Any other
questions & comments

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