

What to extension to do in the rest of the time.

Today is 11 Dec (week 9). The midterm should be submitted **10 Jan** latest, in 4 weeks, and the result project is in the mid-March. One month is left for the Midterm.

To Do List:

- 1) What app out of 3 to take? **Data visualization app** looks more challenging.
- 2) Put this plan on the Gantt chart.
- 3) Repeat the extensions after the teachers on week 9, 11, 13.
- 4) Stick with 1-2 completely new extensions (ideas below). Also do 2-3 remakes from what we already have. Research if more is needed? Look through Slack.
- 5) Ideas for extensions:
 - a. **World Map with the data on it.** COVID spread? Or COVID mortalities for example? There should be timeline input from the user and map should change, and countries are coloured according to the data, and responsive when user hovers over the countries. Map itself, even without data probably very difficult for the browser to handle, e.g. Google maps. Need to find the World map drawing that is not heavy (SVG?). How to solve the problem of hover?
 - i. Data:
 1. <https://data.humdata.org/visualization/covid19-humanitarian-operations/>. They use openmap + leaflet.js (is map heavy?). There is a WHO data in CSV-format <https://covid19.who.int/WHO-COVID-19-global-data.csv>
 2. Another data only mortalities: https://github.com/akarlinsky/world_mortality/blob/main/world_mortality.csv. Potentially interesting, because have different dimensions (monthly and weekly, and there are years) potential to represent it by country in another types of diagrams, charts or graphs. It is also relatively simple to comprehend and the csv file is only 651 kb, will be easy to manipulate with the data.
 3. Geographic distribution of COVID <https://www.ecdc.europa.eu/en/publications-data/download-todays-data-geographic-distribution-covid-19-cases-worldwide>
 - ii. Bad news p5Js does not support svg. Found solution – additional library <https://stackoverflow.com/questions/46880175/changing-the-fill-of-an-svg-image-in-p5-js>
 - iii. Library creates new canvas, find solution or go for another option.
 - b. Snail chart, or circled column representation, where I will represent the election results in Ukraine in last years (allocation of percentages of votes for the political parties).
 - i. <https://ukr.vote/en/elections/8/ukraine> - website with data in csv. Needs cleaning from redundant data and filling with all the years available
 - ii. Basically, I will need to
 1. Receive data and sort it (to make the chart like a snail)

2. translate data into the columns (rectangles)
 3. then rotate them around and make spacing btw them
 4. make different colours
 5. make animations (rotation and column growth)
 6. create timeline from previous years
 7. react to the user
- iii. challenges: recollect how to rotate; research how I can make animations; make user experience comfy; rang input to visualize previous years; possibly complexity of the code may cause slowing down the app - optimize
- 6) Make overall design of the app more beautiful
 - 7) Refactor and beautify the code (ECMA 16, comments, testing).