TP3 – About my data

For today's tutorial, We are going to read and workout a few important subjects about data of users.

GDPR

Please write a few lines about the GDPR:
- What is it?
- When has it been created and what was in place before?
- What has it changed and why?

Google trend

1. Go to the google trend website
2. Compare some queries of your choice over a period of 90 days
3. With the pytrends library (https://github.com/GeneralMills/pytrends), create a similar request in your Deta application
4. Display the trend comparison time serie in Deta with a chart (https://towardsdatascience.com/flask-and-chart-js-tutorial-i-d33e05fba845)
5. Deploy your app on Deta

Timer log

In this part, we will create a python decorator to monitor the time taken by the execution of a function. To test it, we'll make two implementations of a function that count each word in the Shakespear artwork. Please add this python file in your repository so I can see the implementations.

1. Read the documentation to learn what is a @decorator if you don't know this python specification (example of doc https://towardsdatascience.com/flask-and-chart-js-tutorial-i-d33e05fba845)
2. Implement a decorator that log the execution time of a function
3. Download Shakespear artwork (https://towardsdatascience.com/flask-and-chart-js-tutorial-i-d33e05fba845)
4. Create 2 functions that count the number of appearances of each word in this text:
   a. using a dictionary
   b. using the Counter function (https://towardsdatascience.com/flask-and-chart-js-tutorial-i-d33e05fba845)
5. What is the time taken for both implementations for this task? Why is it different? What are the specificities of the underlying data structures (especially the dictionary)?

6. To be more precise, run this experiment 100 times and plot the two distributions of execution times. This allows us to have more robust information (e.g: mean and variance)

Personal data

This isn't a verified exercise. The only purpose of this part is to make you aware of the digital traces one can have on the different websites.
According to what user you are, go on the web-application and find a way to download a dumpa of your data:
- Google localisation: https://myactivity.google.com/activitycontrols?settings=location
- Facebook: https://www.facebook.com/help/212802592074644
- Linkedin: https://www.linkedin.com/help/linkedin/answer/50191/downloading-your-account-data?lang=en
- Twitter: https://help.twitter.com/fr/managing-your-account/how-to-download-your-twitter-archive
- Instagram: https://help.instagram.com/contact/163695614321277

Some of this website may require a day to prepare your data (usually to choose what they want to share with you and also to compress it).