Lab 4 : Final Lab

During this course, you learned the basics of Elasticsearch and the Elastic Stack. In order to go further, you will need to implement the stack in the context of a real project and use the documentation to find information about some aspects we didn't cover in the course : https://www.elastic.co/guide/index.html

Decide what you want to focus on :

- Ingestion of data
- Data visualization
- Queries

Ingestion of data

Take your favorite data set (if no idea, look at open data) and load it in Elasticsearch using the tool of your choice.

Could be :

- Write a script in Python, PHP or Java to format data in JSON and send it to ES over REST API
- Use Logstash to read data from a file, a webservice or a database and send it to ES over REST API
- Use data in Spark and push it to ES via ES-Hadoop connector

Data visualization

Take some available data sets either :

- The "sample dataset" in Kibana (Sample flight data)
- One of the public data set ready to be loaded
    - https://github.com/elastic/examples/tree/master/Exploring%20Public%20Datasets
- Reuse the datasets from Lab 1

Have fun with data visualization in Kibana. Be creative.
Consider testing "Vega" type visualisation and "Canvas".

Queries

Take some available data sets either :

- The "sample dataset" in Kibana (Sample flight data)
- One of the public data set ready to be loaded
    - https://github.com/elastic/examples/tree/master/Exploring%20Public%20Datasets
- Reuse the datasets from Lab 1

Build a small application in local in your favorite language and query ES over the REST API.
Display some information coming from ES.
Optionally include some graphs coming from Kibana in your front end.
Embed a visualization library such as Vega (https://vega.github.io/) or others to render visually data in your front end.

Send source code and/or screenshot of what you achieve as part of Lab 4.