PROJECT 3: LONDON POLICE ANALYSIS

Description of the project:

For this third project we were asked to work with at least two different types of data. We chose to use an API and a csv file.

The project itself:

We struggled a lot to find a relevant API that we could use to analyse. After a lot of thoughts and research (first we wanted to work with data from Netflix, but the API did not exist) we decided to find data about crimes in a particular city. We decided to have an analysis of London and the boroughs within the city (districts).

We used different of data to have the most relevant analysis possible:

* UK Police API
* London crimes (2008-2016): CSV file
* London boroughs demographics: CSV file
* Statistics from the Valuation Office Agency in London

What we wanted to achieve with this analysis:

With the different data that we had in our hands we tried to answer to very basic questions:

* What are the basic crime stats of London?
* What borough is the most/least dangerous?
* What type of crimes is the most present?
* Is there a link between the number of police officer per region and the number of crimes?
* Is there a link between the average rent price (rich/poor boroughs) and the level of crimes?

The problems that we encountered during the process:

* The police API was very difficult to work with. In order to retrieve the information, we had to use API wrappers and the adequate documentation that was not always clear to understand.
* The CSV file that we used had more than 13M rows and many columns, thus it was very difficult to see the patterns at first.
* We used Tableau to add some graphical value to the project however as it is a very new tool for us it took us some time to grasp the way it worked.
* The precision of the analysis might not be as good as we would have hoped. We tried to simplify the data frame to have more understandable table but by doing so we have put aside all the more technical analysis.

The Workflow and Organisation:

* researched for a suitable API.
* connected the API from the UK police and retrieved data for London.
* downloaded data for rent and demographics in London from an official website.
* cleaned the different datas.
* made the analysis of this data by answering to our initial questions.
* created a presentation.