Question 4: "How should the project look like, where should I start, how much effort should I put in?"

## **Important dates**

**1**<sup>st</sup> **April**: creation of groups and submission of subject (email both group members and subject to Omar and myself)

**10**<sup>th</sup> **May**: submission of project (pdf report, code/notebooks, datasets)

**13<sup>th</sup> May**: Presentation (10-15' per group)

## **Project information**

### **Dataset:**

It is up to you to find the dataset. You can use for instance:

- Data you collected by your own (via survey, web scrapping)
- Data you have from company X or Y (but check NDA conditions)
- Data you get from the web (e.g. Web APIs)

Rather choose a dataset that is of interest to you (e.g. related to your field of study).

# Template/guidelines:

Imagine you are consultants and you need to promote your skills of data scientists for analysing data and generating value to the business. Stakeholders have a particular question they want to answer, or at least a broad view about it (e.g. "we have a real churn problem in our company, our customers are leaving us, what can we do about it?")

Typical steps to be followed:

- Presentation of the business problem, why is it relevant, why should I care?
- What value are you expecting to bring with your analysis?
- How do you translate the business problem into a data problem?
- Data description (data source, transformations, descriptive statistics)
- Feature engineering (can we build new features that are informative to answer the business problem we are facing)
- Modelling (justify the technique, defend methodology used, what are the pros and cons)
- Evaluation of the model from different perspectives (statistical/ML performance, interpretation of results, running time, ...)
- What value do you actually bring to the business with your analysis? Could you figure out a way of quantifying the value generated?
- How can your analysis be reused in the future how would you deploy the model in practice?
- Presentation of results communicate results to a broad audience

# **Additional information**

Report: at least 20 pages of report (although, quantity is not quality!)

Presentation of your project: 10-15 minutes