

Some Info on the Project

Methods and Applications of Machine Learning

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Outline

- Some general rules
- Focus of the project
- Available data sets for project
- How to write your project

Some general rules

- *Group size:* 3 students
 - For **each** group you need to send **one email** to *elisa.tosetti@unipd.it* (object: PROJECT) where you indicates your group members. Write in the email the following information: name, surname, student ID (matricola) and data set to be used for the analysis (more on this later) **by the 10th of May**
- *Project submission:* 30th of May
- *Oral discussion:* June 3rd and 4th (at the usual lesson hours)
- *Evaluation:* 10 points - presentations that shows very well thought results can earn one extra point

Focus of the project

Contents:

- To analyse an economic/business/financial problem
- To answer a simple but relevant question within the economic/business/marketing/financial area
- Can focus on prediction but also need to answer a **causal question**

Data:

- A list of example data sets and related information is available on Moodle
- Alternatively, you can decide your own topic. For a list of interesting data sets see:
 - The Harvard dataverse website
 - *Find Economic Articles with Data* website by Sebastian Kranz
 - See this link for some R data sets
 - Kaggle

Structure of the project

- Introduction: What are the *aims* and *objectives* of the analysis?
 - Aims: What you hope to do, your overall intention in the project
 - Objectives: The specific steps you will take to achieve your aim
- Data: Brief description of the data, summary statistics, graphical analysis
- Statistical modelling: what type of model are you using and why? Analysis and interpretation of the results from estimation of one or more models
- Conclusions: Some considerations at the light of the aims established at the beginning
- References?

Oral discussion

- 15/20 minutes where you presents your project (each team member should present around 5-6 minutes)
- Max 10 minutes discussion

Programming language

- Python or R?

Writing your project/presentation

Two possibilities for writing your project/presentation:

- Use of Microsoft Word
- Use Jupiter or other Python environments or R Markdown