



Ciências
ULisboa

Tecnologias de Processamento de dados - 2019/2020

Phase III (deadline: May 31)

Make a Python notebook containing the following sections:

1. OLAP queries
 - a. Check and revise the queries defined in Phase I. Ensure that the queries are meaningful for the processes at hand
 - b. For each query type identify dimensions, attributes and measures for each one
 - c. Write the SQL queries and execute them. Make sure the results are understandable
2. Bottlenecks
 - a. Identify the most important bottlenecks and execute performance analysis
 - b. Propose a plan for improving performance and implement it
 - NOTE, if for improving performance, the existing database schema is to be changed, just describe the proposed changes – do NOT implement it!
 - c. Verify that the proposed modifications have better performance
 - d. Discuss: With the full use of the data warehouse what are the expectation for its growth in 1, 5 and 10 years. Identify what approaches would be used to address such an increase in data
3. Do a critical assessment of this full project
 - a. For each of the 3 phases of the project discuss what went right, wrong and what would you do to make it better?
 - b. For each phase propose a grade (1-20) Justify your grade

The notebook should be produced with full output (that should not be longer than necessary!). **If images are present, ZIP the notebook with all the required images attached**

The Notebook can be written in Portuguese or English. It is to be submitted on the course's Moodle **until 23:59 of May 31**. On Section Zero it must contain the **group number, the Student Id's and names, and an estimation of how many hours each student contributed to this phase**