Data Warehouses

LAB ASSIGNMENT

GOALS

To design a data warehouse, implement it, and exemplify its use.

WORKGROUPS

The assignment must be performed in groups of 3 to 4 members.

DATES

The report will be submitted until 2023-03-29, to be discussed on 2023-03-31.

SUBJECT

The subject of the assignment is chosen by the group. However, it must comply to, at least, the following rules:

- The number of facts must be over 10000 with, at least, one additive measure.
    - Ex: electricity consumption, sales, phone calls, product composition cost, distance or price in transport companies or highways, number of votes, etc.
- There must be aggregated facts or snapshots with at least one semi-additive measure.
- There must be at least 4 dimensions, one of which temporal, and some of them are common to both kinds of facts.

The assignment subject must be approved by the teacher, who if need arises, may suggest a subject.

REPORT

The report includes the following parts, corresponding to the work to be developed:

1. Subject description. Assignment requirements.
2. Planning: dimensional bus matrix, dimensions and facts dictionary
3. Dimensional data model (explained).
4. Data sources selection. Extraction, transformation and loading.
5. Querying and data analysis.
6. Critical reflection about the advantages and shortcomes with respect to the operational databases.
7. Conclusion.