

CS 523 – Database Topics

Mini Project 2

Due Date: To Be Determined

Background:

For the second mini project this semester you are to clean up your dataset, perform a STAR schema design on it and then perform some OLAP queries on it. Again, there are two parts: 1) a written paper describing your work, and 2) a presentation to the class on your findings.

Paper Requirements

1. **Introduction.** *This is repeated from Mini Project 1*
2. **In Depth Description** *This is repeated from Mini Project 1*
3. **Preprocessing.** Describe any cleanup activities that were done (*some of this might have been done in Mini Project 1*).
4. **STAR Schema Design.** Describe what your fact table is and what dimensions exist. Also, list any rollups you may have. Describe how you converted your raw project data into this.
5. **OLAP Queries.** Develop at least 5 different and distinct OLAP queries to perform on your data. For each one, describe what it is to do and why its results may be important.
6. **Implementation.** Show the commands used to implement your STAR schema as well as your data cleansing activities (show screenshots from a running database). Also, supply the SQL code used to run the OLAP queries and at least a sample of each output.
7. **Conclusions.** Describe what conclusions may be drawn from the actual results of running your SQL OLAP queries.
8. **Bibliography.** List all books, papers, and websites you have used so far in Mini Projects 1 and 2.

Presentation Requirements

1. I would suggest outlining your presentation following the outline of your paper. Use a large enough font so that all results are readable.
2. The implementation may be presented via screenshots of the queries running.
3. I suggest using PowerPoint to put together the presentation.
4. Aim for a 10 minute presentation.

NOTE 1: I found a copy of the slides very useful, so please include these along with the written report when you turn in your documentation for this project.

NOTE 2: When taking screenshots, invert the colors so that the background is white and the letters are black (white letters on a black background is hard on printer toner cartridges).