

GIC #1

In this task you will take an OLTP data source and convert it into an OLAP design. This is an GROUP project and as such your group need only submit 1 copy. Please note the deliverables below and the questions your OLAP must be able to answer.

Deliverables:

1. A word document containing
 1. Database Table Design – This should be done in draw.io or another graphical program. **DO NOT USE THE GRAPHICAL PROGRAM IN WORKBENCH.**
 2. The SQL queries that answer the questions below.
 3. Statement of Granularity for the fact tables
 4. Statement of Dimensional History applied to each dimension table.

NOTES/HINTS

1. This is NOT an individual assignment. Only 1 submission per group is required
2. Please note that these queries are to be supplied to a Manager. Given this, please have the query render in a manner that can be consumed by a non-technical individual. i.e. don't just put count, put the product and count.
3. Please do a one fact table design.
 1. Note, please consult your "questions" to help with modeling cnt fields.
4. Note, that semester can be placed on the datetime. Basically, this is a form of a hierarchy.

Questions to answer via SQL from your OLAP

1. List which students are professors.
2. Average # of classes taken by students each semester.
3. Room utilization report by semester.
 1. You can define room utilization as (total students using class / seating capacity)
 2. *hint*, you can sum the cnt field if you do student's as your granularity then divide by the capacity.

