San José State University
Department of Computer Engineering

CMPE 226
Database Systems
Spring 2017
Instructor: Ron Mak

Assignment #6

Assigned: Tuesday, April 4
Due: Tuesday, April 11 at 11:59 pm
Team assignment, 100 points max

Dimensional modeling and star schema

The purpose of this assignment is to give your team experience designing and creating a dimensional data model with a star schema.

- Create a dimensional model with a star schema based on your project's relational schema.
- Your model should have at least 4 dimension tables and 2 fact tables.
- Use ERDPlus to draw your star schema.
- Describe how your dimension and fact tables are populated from your operational tables.
  - For now, your dimensional model can contain data that don't come from your operational tables (i.e., you can generate some artificial data).
- Put some sample data into your dimension and fact tables.
- Create at least one query per fact table.
  - Describe the query in English.
  - Write and execute the SQL.

What to turn in

Create a zip file named after your team (e.g., `Supercoders.zip`) containing:

- Relational schema of your operational database.
- The star schema of your dimensional model.
- Short write-up of how your dimension and fact tables are populated.
- Queries and their text files containing the query results.
- A dump of your MariaDB implementation of your dimensional model.

Submit into Canvas: **Assignment #6**

Rubrics

Criteria	Max points
Dimensional model (star schema generated by ERDPlus)	**95**
• Two fact tables	• 10
• Four dimension tables	• 20
• Short write-up: How your dimension and fact tables are populated	• 10
• One query for each fact table	
○ English descriptions	○ 20
○ SQL that joins the fact tables with the dimension tables	○ 20
○ Output text file	○ 10
• Database dump	• 5
Relational model	**5**
• Relational schema of your operational database	• 5