IST722: Unit 06 Participation Questions

**This is an individual assignment.**

**Before you begin, please make sure you’ve read and understand 1) our class honor code, 2) course policies on late work and 3) participation policies as posted on the syllabus. “I didn’t know” is not an excuse.**

**You should cite your sources in a standard format like MPA or APA and include a list of works cited.**

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# Instructions

Answer each of the following questions as concisely as possible. More is not necessarily better. Please justify your answer by citing your sources from the assigned readings from our textbooks, our class lectures, or online if directed to do so. Be sure to cite in text and include a list of works cited. Place your answer below each question. When you’re finished, print out this document and bring it to class as part of your participation grade.

# Questions

1. As a best practice, what should be the primary key of a dimension table? Explain. There is one notable exception to this rule. What is it?

As a best practice, surrogate keys should be the primary key of a dimension table. Surrogate key is not derived from any attributes, it’s autogenerated which means its data type will be integer. It is advisable to use integer instead of Big Integer or varchar as the primary key of dimension to save space. The primary key should be a short numeric data type or a short single code (as used for codes). We should not use long character strings as primary keys. However, the primary key should not be null

1. Every dimension table should include a natural or business key. Explain why this is necessary.

Business processes are the activities performed by your organization; they represent measurement events, like taking an order or billing a customer. Business processes typically capture or generate unique performance metrics associated with each event. These metrics translate into facts, with each business process represented by a single atomic fact table. In addition to single process fact tables, consolidated fact tables are sometimes created that combine metrics from multiple processes into one fact table at a common level of detail. Again, consolidated fact tables are a complement to the detailed single-process fact tables, not a substitute for them.

1. As a best practice what should be the primary key of the fact table. Explain.

As a best practice, composite key made up of dimension foreign keys and degenerate dimension should be the primary keys of the fact table. For e.g. If we have an entity called order and order number as an attribute which is a degenerate dimension, then order number can be used as a primary key of the fact table. However, surrogate keys can be used as a primary key in a fact table but they increase size and do not improve performance.

WORKS CITED:

Inmon, W. H.BuildingtheDataWarehouse,FourthEdition. John Wiley & Sons.,

2005.Kimball, Ralph, andMargy Ross.TheDataWarehouseToolkit: TheDefinitiveGuidetoDimensionalModeling,ThirdEdition. John Wiley & Sons. 2013.Books24x7