IST722: Unit 03 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.

Your Name:	Rashika Singh
Your Email:	rsingh37@syr.edu

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] What does it mean to take a user centric versus data centric approach to building a data warehouse? Which do you prefer and why?

Data centric approach is building the warehouse as per organization's data and user centric approach is building the data warehouse as per user requirements. Data centric is also the Inmon approach and user-centric is the Kimball approach. I would prefer the user centric approach as it requires building the warehouse as per user needs which I think is better as all the user needs and requirements can be fulfilled while building a data warehouse.

[2] Explain the difference between a functional and non-functional requirement?

Functional requirements focus on "what the system should do" and which address the needs of users. They include business rules, transactions adjustments, administrative functions, historical reports, external interfaces
Non- functional requirements guide and constrain the system architecture. They outline procedures, rules and regulations which include performance, scalability, capacity, etc

[3] What are the three business process types? Provide an example of each.

The three business process types are:
1. Events or transactions- It is based on a business event with one row per line. It corresponds to a point in space and time. Once it is inserted it is not revised or updated with rows inserted into fact table when transactions or event occurs.
Example- Sales, returns
2. Accumulating Snapshot- It is based on status and is used to capture a business process workflow. Fact rows are initially inserted and then updated as milestones occur. Fact tables have dates that denote milestones and record change is status.
Example- Order Delivery tracking

3. Periodic Snapshot Fact- Snapshots of consecutive measurements are taken and stacked in the fact table which are taken monthly, weekly, etc. They complement detailed transactions but do not represent them and are only required when source system do not store transactions.
Example- Semester class schedule

[4] What are the three types of facts? Provide an example of each.

There are three types of facts:
1. Additive-
These can be summed across all the dimensions and are the most useful fact.
Example- sales of product
2. Semi-Additive-
They cannot be summed across all the dimensions such as the time durations, however, sometimes they can be summed across the time dimension.
Example- Time logged on computer
3. Non-Additive-
They cannot be summed across any dimension and they do not belong to the fact table but with the dimension table.
Example-height of students.

[5] Come up with your own functional requirement for any business/department – state that in a single statement.
Then, identify the business process, business process type, dimensions and facts based on that statement.

How many coffees did coffee shop sell in last week?
How many coffees- Fact or measure
Coffee- type of product- attribute of Product Dimension
Sell (Sales)- Business Process-Fact table (set of related measures)
Week- attribute of Date Dimension
Business Process type- transactions

WORKS CITED:
Class slides and Professor Fudge slides