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Reading Check 4

Chapter 5

15points

**Instructions:** Please **highlight the answer(s)** that you are choosing. Once completed, please submit your highlighted version back into the assignment task. Ensure you **replace the name and student ID at the top of this page**. Please reach out to me if you have trouble uploading your assignment.

1. What is the term that are the logical mappings between the physical data stored in the technology stack, along with the business terminology (1 points) - (86 – page)

These were Managed by individual Vendors through unique **Semantic layers:** logicalmappings between the physical data stored in the technology stack, along with business terminology.

1. List and define the **4 Common Approaches to Data Modeling** (8 points)- (88 -page)

Common Approaches to Data Modeling: The analytical dara landscape today predominantly uses four main patterns of data modeling.

* Normalized Modeling
* Dimensional (Denormalized) Modeling
* Data Vault Modeling
* One Big Table (OBT) Modeling

1. Within the Data Vault Modeling, what are the **3 components** that allow the data vault to handle complex datasets efficiently? (3 points) - 90- page

The data vault modeling approach has been gaining traction since the 2010s and is favored for its flexibility, scalability, and adaptability.

The model consists of three main components that allow the data vault model to handle complex, interconnected datasets efficiently:

* **Hubs**: Representing business keys or identifiers.
* **Links**: Defining relationships between data elements.
* **Satellites**: Representing descriptive attributes of data.

1. List and define the **3 main components of dbt** (Data Build Tool) (3 points)

(94 page and 95 page)

The tool consists of three main components:

* **Development**: Where users craft transformations in SQL and implement business logic.
* **Testing**: Where users conduct tests to ensure the transformed data is formatted correctly.
* **Documentation**: Where documentation for the transformations is produced.