

# Summary and Highlights

- There are three main data categories. These include: structured, unstructured, and semi-structured.
- Data repositories store and manage data centrally, including relational and non-relational databases.
- Information Models provide abstract representations of entities and relationships, whereas Data Models serve as blueprints for practical database structures.
- An Entity-Relationship Diagram (ERD) is a visual representation that illustrates the relationships and interactions between entities in a database.
- The fundamental components that form the structure of a relationship include entities, relationship sets, and crow's foot notations.
- Varchar, an abbreviation for variable character, is a data type that stores character strings.
- Sets characterized by their unordered collections include operations such as membership, subsets, union, and intersection.
- Relations describe connections between set elements and consist of two essential components: The Relation Schema and the Relation Instance.