What is ER model? What are the elements of ER model? What are the notations of ER diagram?

An entity relationship model (ER model) is a way of representing the entities and the relationships between the entities in order to create a database.

Element/Notation of ER model/diagram:

1. Entity:

- Think of an entity as something in the real world that you can identify, like a person, place, or thing.
- It's a specific object that exists and is different from other objects.
- Entities can be concrete (like a person) or abstract (like an idea).

2. Entity Set:

- An entity set is just a collection or group of similar entities.
- For example, if "Person" is an entity, then the set of all people would be the "Person" entity set.

3. Attribute:

- Attributes are the characteristics or properties that describe an entity.
- If "Person" is an entity, then attributes could include things like "Name," "Age," or "Address."
- Attributes are like the details or features of an entity.

4. Relationship:

- Relationships show how entities are connected or associated with each other.
- Picture a relationship as a link between entities.
- For instance, if "Person" is an entity and "Works for" is a relationship, it could connect a person to a company entity.

Related posts:

1. What is database management system (DBMS)? What are the tasks performed by

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users in DBMS?

- 2. What are the advantages and disadvantages of DBMS?
- 3. What do you understand by database users? Describe the different types of database users.
- 4. Who are data administrators? What are the functions of database administrator? OR Discuss the role of database administrator.
- 5. What is data abstraction? Explain different levels of abstraction.
- 6. Explain the differences between physical level, conceptual level and view level of data abstraction.
- 7. Explain the difference between database management system (DBMS) and file system.
- 8. Discuss the architecture of DBMS. What are the types of DBMS architecture?
- 9. What are data models? Briefly explain different types of data models.
- 10. Describe data schema and instances.
- 11. Describe data independence with its types
- 12. Describe the classification of database language. Which type of language is SQL?
- 13. Explain DBMS interfaces. What are the various DBMS interfaces?
- 14. What do you understand by attributes and domain ?Explain various types of attributes used in conceptual data model.
- 15. Construct an ER diagram for University system.
- 16. Construct an ER diagram for the registrar's office
- 17. Explain the primary key, super key, foreign key and candidate key with example. OR Define key. Explain various types of keys.
- 18. What do you mean by a key to the relation? Explain the differences between super key, candidate key and primary key.
- 19. Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.
- 20. What is Unified Modeling Language? Explain different types of UML.

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- 21. What is relational model? Explain with example.
- 22. Explain constraints and its types.
- 23. Consider the following relations:
- 24. What are the additional operations in relational algebra?
- 25. Explain integrity constraints.
- 26. Explain the following constraints: i. Entity integrity constraint. ii. Referential integrity constraint. iii. Domain constraint.
- 27. Describe mapping constraints with its types.
- 28. Explain how a database is modified in SQL. OR Explain database modification.
- 29. Discuss join and types with suitable example. Define join. Explain different types of join.
- 30. Describe the SQL set operations