Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.

Generalization:

Definition: Generalization is like combining two or more similar things to create a more general and abstract things.

Example: Think of different types of bank accounts like savings and current accounts. Generalization in this context would create a higher-level entity called "Account" that encompasses both savings and current accounts. It's like saying, "These are all types of accounts."

Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.

Specialization:

- Definition: Specialization is the opposite; it's breaking down a general thing into more specific parts.
- Example: Consider a general category like "Person." Specialization in this case would create two lower-level entities called "Employee" and "Customer." It's breaking down the general concept of a person into more specific roles.

Aggregation:

- Definition: Aggregation is treating relationships between things as if they are things themselves.
- Example: Imagine there's a relationship between employees, branches, and jobs.

Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.

Aggregation would create a higher-level entity called 'works on' to represent this relationship. Additionally, you might have another relationship called 'Manages' between 'works on' and 'manager,' indicating who manages what tasks.

Comparison:

Aspect	Generalization	Specialization	Aggregation
Process Type	Bottom-up approach	Top-down approach	Abstraction

Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.

Aspect	Generalization	Specialization	Aggregation
Purpose	Combine common attributes of lower-level entities	Break down a higher-level entity into two or more lower-level entities	Treat relationships as higher-level entities
Effect on Schema Size	Reduces the schema size	Increases the schema size	Increases the schema size
Application Scope	Applied to a group of entities	Applied to a single entity	Applied to a group of relationships
Relationship with Entities	Common attributes form a new higher-level entity	Higher-level entity is broken down into lower-level entities	Relationships are treated as higher-level entities, participating in another relationship set

Related posts:

1. What is database management system (DBMS) ? What are the tasks performed by 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 adinistrator.
5. What is data abstraction ? Explain different levels ofabstraction.
6. Explain the differences between physical level,conceptual level and view level of data abstraction.

EasyExamNotes.com

Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.

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

15. What do you understand by attributes and domain ?Explain various types of attributes used in conceptual data model.

16. Construct an ER diagram for University system.

17. Construct an ER diagram for the registrar's office

18. Explain the primary key, super key, foreign key and candidate key with example. OR Define key. Explain various types of keys.

19. What do you mean by a key to the relation ? Explain the differences between super key, candidate key and primary key.

20. What is Unified Modeling Language ? Explain different types of UML.

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.

Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.

29. Discuss join and types with suitable example. Define join. Explain different types of join.

30. Describe the SQL set operations