ENTITY AND ATTRIBUTE

ENTITY

An entity is an object or component of data. An entity is represented as rectangle in an ER diagram.

For example: Let we have two entities Student and College and these two entities have many to one relationship as many students study in a single college.

ATTRIBUTE

An attribute describes the property of an entity. An attribute is represented as Oval in an ER diagram. There are four types of attributes:

- 1. Key attribute
- 2. Composite attribute
- 3. Multivalued attribute
- 4. Derived attribute
- 1. Key attribute:

A key attribute can uniquely identify an entity from an entity set. For example, student roll number can uniquely identify a student from a set of students. Key attribute is represented by oval same as other attributes however the text of key attribute is underlined.

2. Composite attribute:

An attribute that is a combination of other attributes is known as composite attribute. For example, In student entity, the student address is a composite attribute as an address is composed of other attributes such as pin code, state, country.

3. Multivalued attribute:

An attribute that can hold multiple values is known as multivalued attribute. It is represented

with double ovals in an ER Diagram. For example – A person can have more than one phone numbers so the phone number attribute is multivalued.

4. Derived attribute:

A derived attribute is one whose value is dynamic and derived from another attribute. It is represented by dashed oval in an ER Diagram. For example – Person age is a derived attribute as it changes over time and can be derived from another attribute (Date of birth).

More topics from DBMS to read:

EasyExamNotes.com covered following topics in these notes.

- 1. Introduction to Database
- 2. Introduction to DBMS
- 3. Advantages and disadvantages of DBMS
- 4. DML, DDL and DCL
- 5. Domains
- 6. Introduction to data models
- 7. Entities and Attributes
- 8. Relationship among entities
- 9. Tuples
- 10. Attributes
- 11. Relation
- 12. Keys
- 13. Relational Database
- 14. Twelve rules of CODD
- 15. Schemas
- 16. Integrity Constraints
- 17. Normalization
- 18. Functional dependency

- 19. Transaction processing concepts
- 20. Schedule
- 21. Serializability
- 22. OODBMS vs RDBMS
- 23. RDBMS
- 24. SQL join
- 25. SQL functions: SUM(), AVG(), MAX(), MIN(), COUNT().
- 26. Block, Extent, Segment
- 27. Oracle Background processes
- 28. Trigger
- 29. Oracle cursor
- 30. Introduction to Concurrency Control

A list of Video lectures

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References:

- 1. Korth, Silbertz, Sudarshan, "Fundamental of Database System", McGraw Hill
- 2. Atul Kahate, "Introduction to Database Management System", Pearson Educations

Related Posts:

- 1. SQL Functions
- 2. History of DBMS
- 3. Introduction to DBMS
- 4. Introduction to Database

- 5. Advantages and Disadvantages of DBMS
- 6. SQL | DDL, DML, DCL Commands
- 7. Domain
- 8. Entity and Attribute
- 9. Relationship among entities
- 10. Attribute
- 11. Database Relation
- 12. DBMS Keys
- 13. Schema
- 14. Twelve rules of CODD
- 15. Normalization
- 16. Functional Dependency
- 17. Transaction processing concepts
- 18. Schedules
- 19. Serializability
- 20. OODBMS vs RDBMS
- 21. RDBMS
- 22. SQL Join
- 23. SQL Functions
- 24. Trigger
- 25. Oracle cursor
- 26. Introduction to Concurrency control
- 27. Net 11
- 28. NET 3
- 29. NET 2
- 30. GATE, AVG function and join DBMS | Prof. Jayesh Umre
- 31. GATE 2014 DBMS FIND Maximum number of Super keys | Prof. Jayesh Umre

- 32. GATE 2017 DBMS Query | Prof. Jayesh Umre
- 33. Data types
- 34. Check Constraint
- 35. Primary and Foreign key
- 36. SQL join
- 37. DDLDMLDCL
- 38. Database applications
- 39. Disadvantages of file system data management
- 40. RGPV DBMS Explain the concepts of generalization and aggregation with appropriate examples
- 41. RGPV solved Database approach vs Traditional file accessing approach
- 42. Find all employees who live in the city where the company for which they work is located
- 43. Concept of table spaces, segments, extents and block
- 44. Triggers: mutating errors, instead of triggers
- 45. Dedicated Server vs Multi-Threaded Server
- 46. Distributed database, database links, and snapshot
- 47. RDBMS Security
- 48. SQL queries for various join types
- 49. Cursor management: nested and parameterized cursors
- 50. Oracle exception handling mechanism
- 51. Stored Procedures and Parameters