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

- Click here

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