Entity

A real-world thing either living or non-living that is easily recognizable and non recognizable. It is anything in the enterprise that is to be represented in our database. It may be a physical thing or simply a fact about the enterprise or an event that happens in the real world.

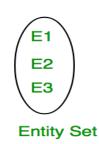
An entity can be place, person, object, event or a concept, which stores data in the database. The characteristics of entities are must have an attribute, and a unique key. Every entity is made up of some 'attrik ______ esent that entity.

Set of all entity is called entity set

Examples of entities:

Person: Employee, Student, Patient

Place: Store, Building



Student

Entity Type



Attribute

Attributes are the properties which define the entity type. For example, Roll_No, Name, DOB, Age, Address, Mobile_No are the attributes which defines entity type Student. In ER diagram, attribute is represented by an oval.



1. Key Attribute:

The attribute which uniquely identifies each entity in the entity set is called key attribute.

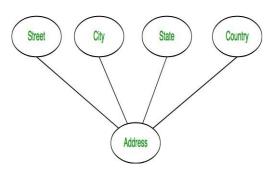
For example, Roll_No will be unique for each student. In ER diagram, key attribute is represented by an oval with underlying lines.





2. Composite Attribute –

An attribute **composed of many other attribute** is called as composite attribute. For example, Address attribute of student Entity type consists of Street, City, State, and Country. In ER diagram, composite attribute is represented by an oval comprising of ovals



3. Multivalued Attribute –

An attribute consisting more than one value for a given entity. For example, Phone_No (can be more than one for a given student). In ER diagram, multivalued attribute is represented by double oval.



4. Derived Attribute –

An attribute which can be derived from other attributes of the entity type is known as derived attribute. e.g.; Age (can be derived from DOB). In ER diagram, derived attribute is represented by dashed oval.





The complete entity type Student with its attributes can be represented as:

