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## 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.

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).