

EXTENDED E-R MODEL

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Extended E-R Model

A high level Model which is extension of E-R Model with Concepts of generalization, Specialization, Aggregation and attribute inheritance.

Thus E-E-R Model (Extended E-R Model) Contains modeling Concept of E-R Model with following Concepts:-

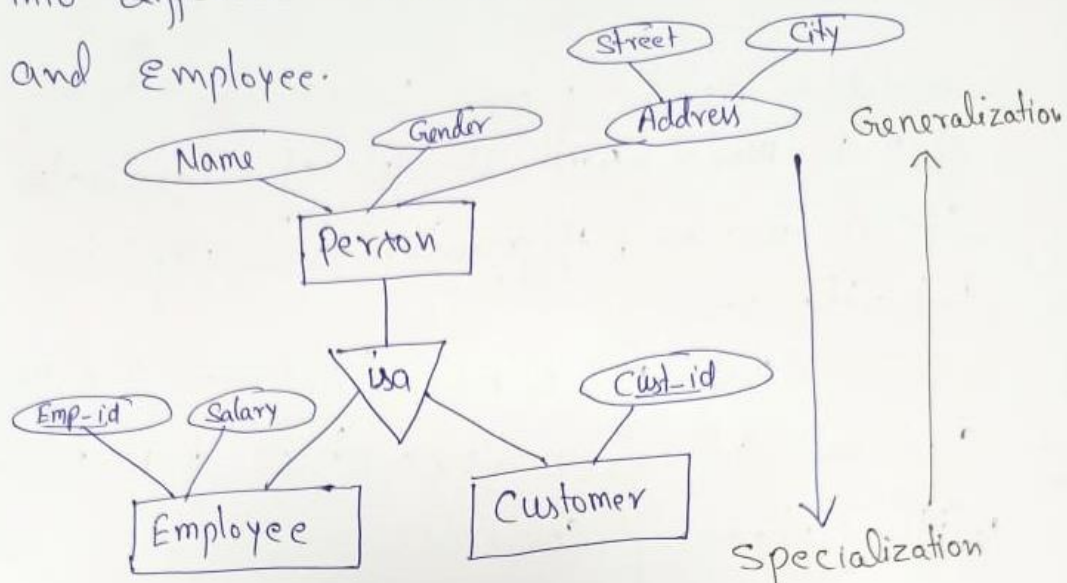
- ① Specialization
- ② Generalization
- ③ Aggregation
- ④ Higher and Lower level entities

Specialization and Generalization:-

Specialization is a process of making subgroups of an entity set. These subgroups will have some different attributes.

For example in any system a person entity can be further subdivided

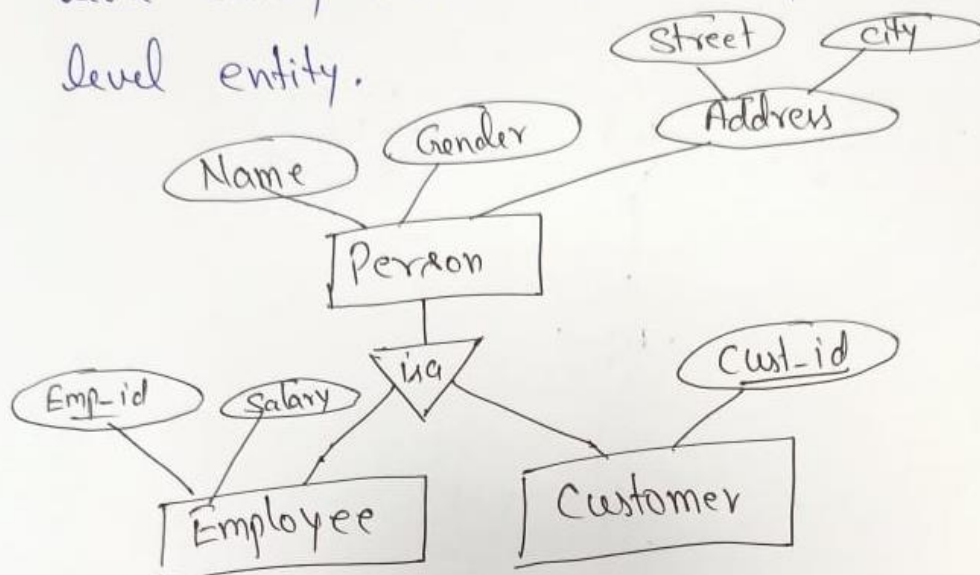
into different subentities like Customer and Employee.



Here where we are subdividing the super entity Person into subentities like Employee and Customer, this approach is known as specialization.

Whereas generalization is a process of making more general form of entity. It is a bottom up approach where different entities are grouped together to form a more generalized entity. In above example Employee and Customer is used to form more general form of Customer and Employee which is Person.

Attribute Inheritance is a concept of EER model in which the attribute of higher level entity are inherited by the lower level entity.

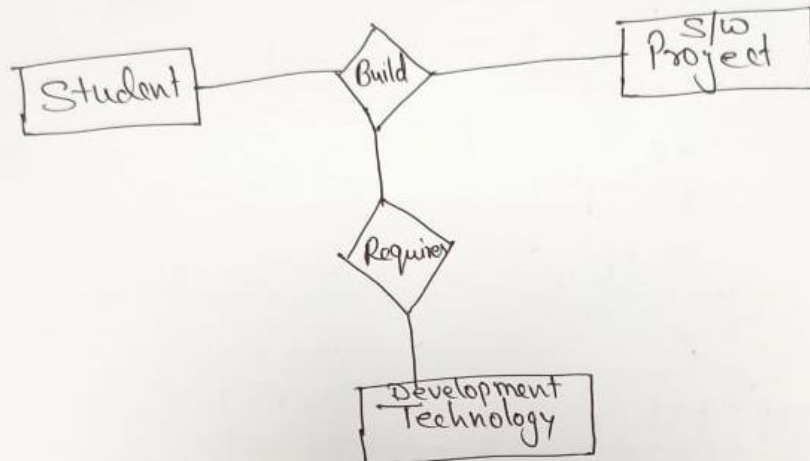


In above example the attribute (Name, Gender, Address) of higher level entity person will be inherited by both sub entities (Employee and Customer). This concept is known as Attribute inheritance.

Aggregation:-

It is a concept in which relationship between Entities are considered as a single entity (ie aggregated into a higher level entity).

example:



Aggregation

Here all there three entities have relationship (Binary) among them which is aggregated to form higher level entities.

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