



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A’ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(IoT and
Cybersecurity Including BCT)**

COURSE NAME : 19SB504 DATABASE MANAGEMENT SYSTEMS

III YEAR / V SEMESTER

Unit III-E-R Diagram models and NORMAL FORMS

Topic : Extended ER features



Extended ER features

➤ Specialization and Generalization -

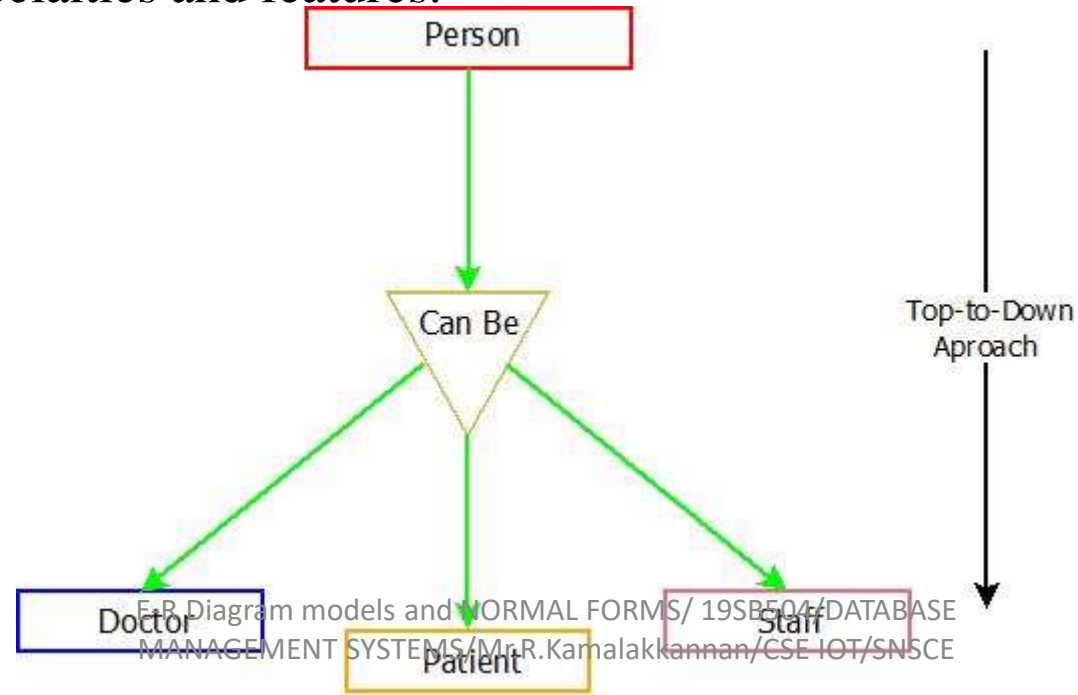
- The process of making subclass from a general concept – specialization.(top – down process)
- The process of making superclass from subclass – Generalization. (bottom up process)
- Superclass: An entity type that represents a general concept at a high level
- Subclass: An entity type that represents a specific concept at a low levels



Extended ER features

➤ Specialization:

- The procedure to split up the entities into further sub entities on the basis of their functionalities, specialties and features.





Extended ER features

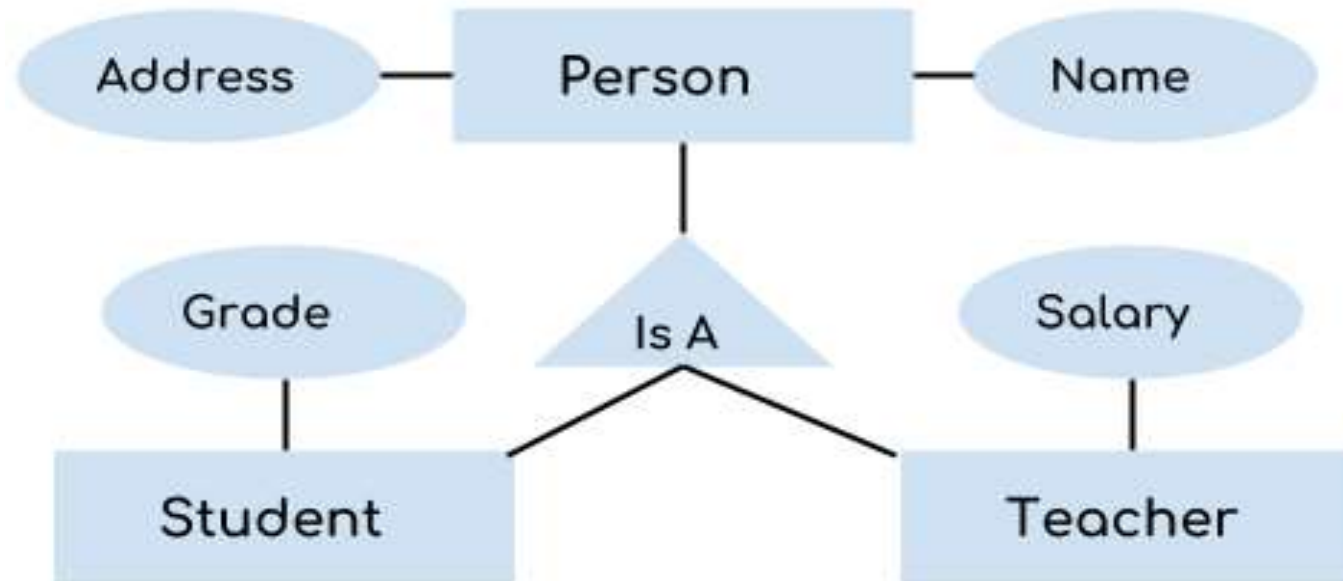
➤ **Generalization:**

- The sub entities are combined together into a super entity set on the basis of some common features in such a way that the new entity thus formed contains all the features of the sub entities.



Extended ER features

➤ Generalization:



Generalization



Extended ER features

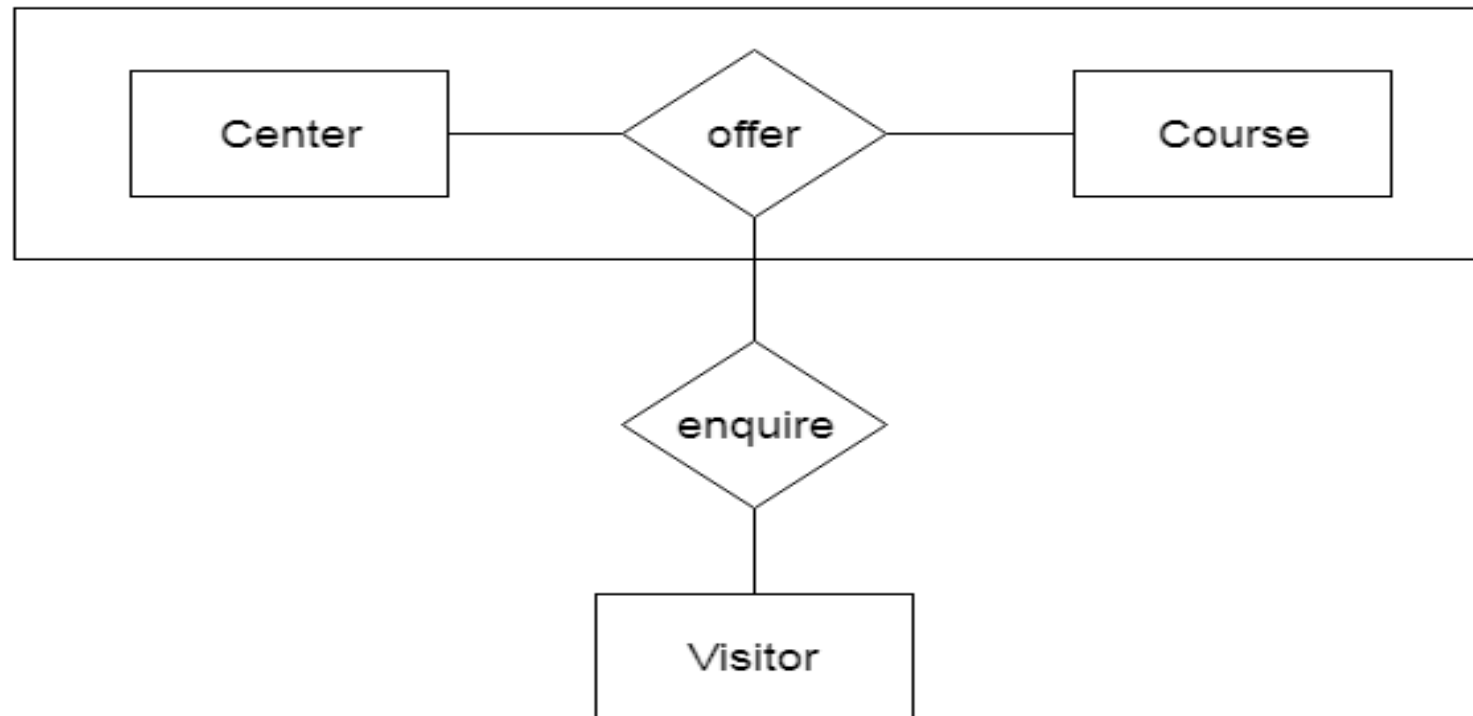
➤ **Aggregation:**

- The relation between two entities is treated as a single entity.
- In aggregation, relationship with its corresponding entities is aggregated into a higher level entity.



Extended ER features

➤ Aggregation:





Thank You.....