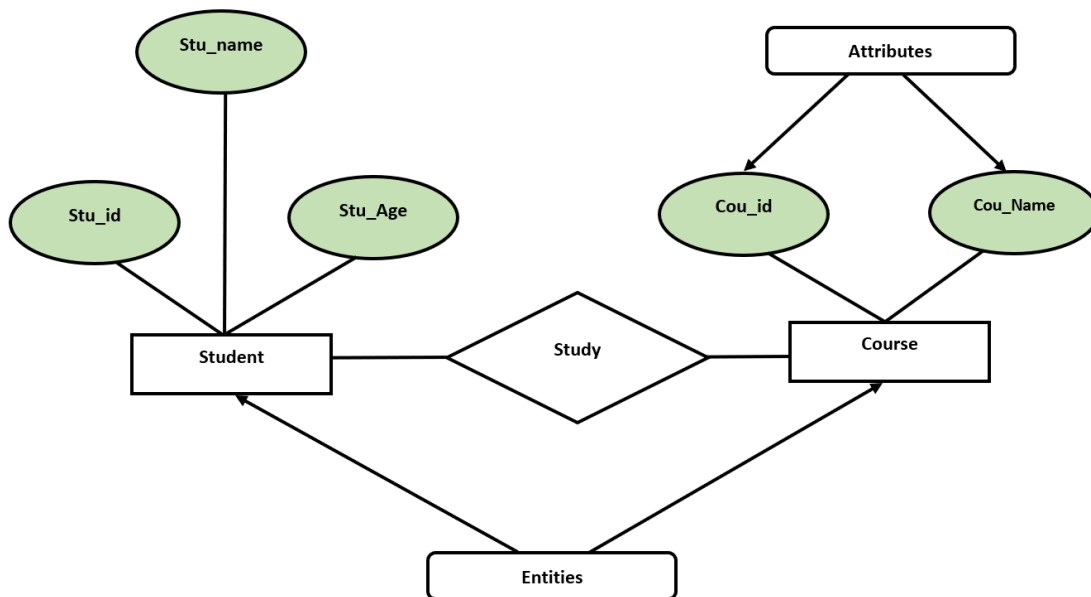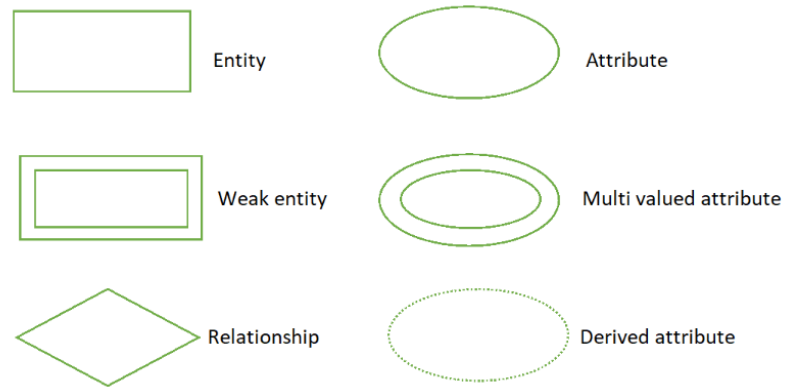# DBMS

Data Models:

- ➢ Relational data model
- ➢ Entity relationship data model
- ➢ Object based data model
- ➢ Semi structured data model

Entity relationship data model:

- ER diagram helps you to conceptualize database.
- ER diagram gives you a better understanding of the information to be stored in a database.
- It reduces complexity.
- It helps you describe elements using entity relationship models.
- It allows users to get the preview of the longer structure of the database.

▭	Entity	◯	Attribute
▤	Weak entity	◎	Multi valued attribute
◇	Relationship	⬭	Derived attribute

Attributes:

- Key Attribute
- Composite Attribute
- Multivalued attribute
- Derived attribute

Entities:

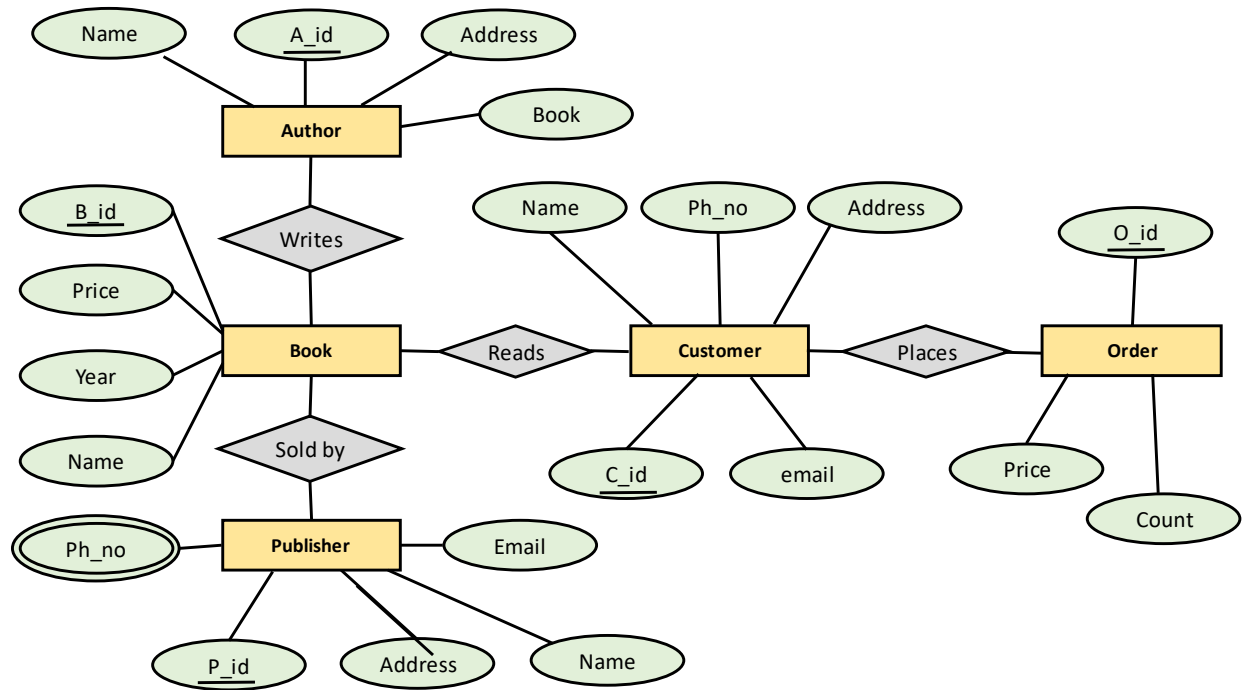Weak entity: An entity that needs rely over other entity is called weak entity.

Relationships:

- One - to – One relationship
- One – to – Many relationship
- Many – to – One relationship
- Many – to – One relationship.

Normalization:

Process of organizing data in databases

Activity:

BOOK

B_id	Name	Price	Year
101	ABC	1000	2020
102	XYZ	750	2021
103	DEF	1050	2022
104	GHI	1000	2019

B_id	Name
101	ABC
102	XYZ
103	DEF
104	GHI

B_id	Price	Year
101	1000	2020
102	750	2021
103	1050	2022
104	1000	2019

B_id	Price
101	1000
102	750
103	1050
104	1000

B_id	Year
101	2020
102	2021
103	2022
104	2019

Author

A_id	Name	Address	Book
1001	Priya	Chennai	ABC
1001	Priya	Chennai	XYZ
1002	Sravani	Nellore	DEF
1002	Sravani	Nellore	GHI

A_id	Book
1001	ABC
1001	XYZ
1002	DEF
1002	GHI

A_id	Name	Address
1001	Priya	Chennai
1001	Priya	Chennai
1002	Sravani	Nellore
1002	Sravani	Nellore

A_id	Name
1001	Priya
1001	Priya
1002	Sravani
1002	Sravani

A_id	Address
1001	Chennai
1001	Chennai
1002	Nellore
1002	Nellore

Publisher

P_id	Name	Address	E_mail	Ph_no
001	XXX	Chennai	xxx@gmail.com	9999999999
001	XXX	Chennai	xxx@gmail.com	7777777777
002	YYY	Nellore	yyy@gmail.com	8888888888
002	YYY	Nellore	yyy@gmail.com	6666666666

P_id	Name
001	XXX
001	XXX
002	YYY
002	YYY

P_id	Address	E_mail	Ph_no
001	Chennai	xxx@gmail.com	9999999999
001	Chennai	xxx@gmail.com	7777777777
002	Nellore	yyy@gmail.com	8888888888
002	Nellore	yyy@gmail.com	6666666666

P_id	E_mail
001	xxx@gmail.com
001	xxx@gmail.com
002	yyy@gmail.com
002	yyy@gmail.com

Address	E_mail	Ph_no
Chennai	xxx@gmail.com	9999999999
Chennai	xxx@gmail.com	7777777777
Nellore	yyy@gmail.com	8888888888
Nellore	yyy@gmail.com	6666666666

Customer

C_id	Name	email	Address	Ph_no
100	Hari	hari@gmail.com	Vellore	5555555555

C_id	Name	email
100	Hari	hari@gmail.com

email	Address	Ph_no
hari@gmail.com	Vellore	5555555555

Order

O_id	Count	Price
1011	1	1000

O_id	Price
1011	1000

O_id	Count
1011	1