

# Catatan 1



# Entity Relationship Diagram (ERD)



# Pemodelan Data dengan Menggunakan ER-MODEL

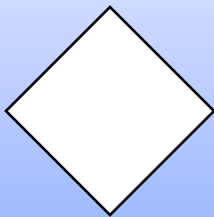
ER(Entity Relationship) Model ?

- Merupakan model data tingkat tinggi yg populer untuk model data relasional
- Model ini dengan sejumlah variasinya sering digunakan dalam desain konseptual dari aplikasi database.

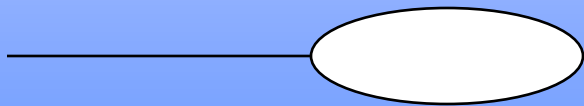
# Notasi Utk ER-Diagram



ENTITY TYPE

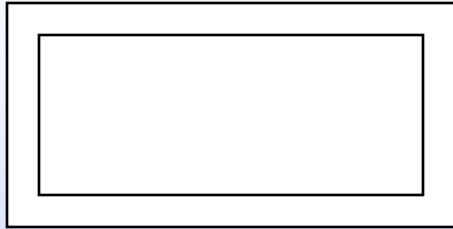


RELATIONSHIP TYPE

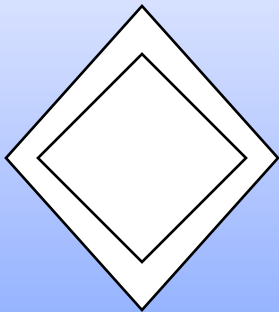


ATTRIBUTE

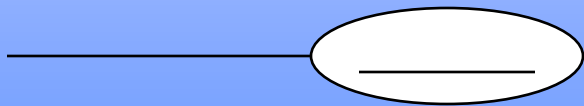
# Notasi Utk ER-Diagram



WEAK ENTITY TYPE



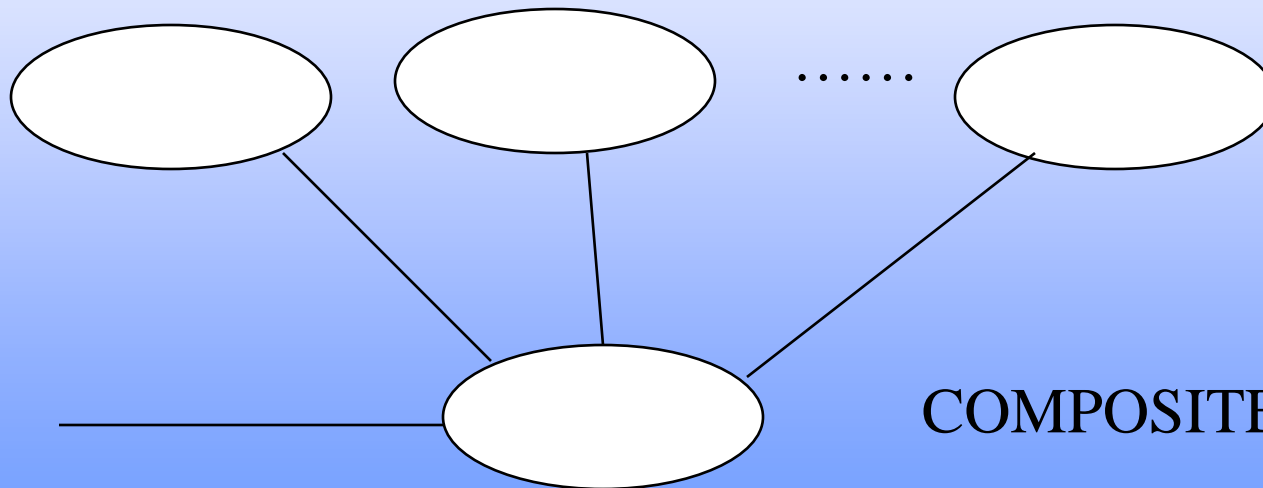
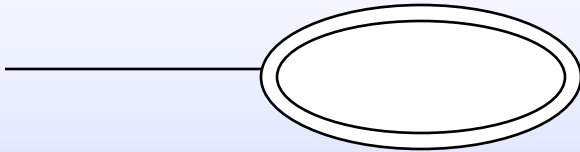
IDENTIFYING  
RELATIONSHIP TYPE



KEY ATTRIBUTE

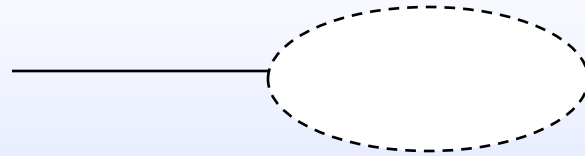
# Notasi Utk ER-Diagram

MULTIVALUED  
ATTRIBUTE

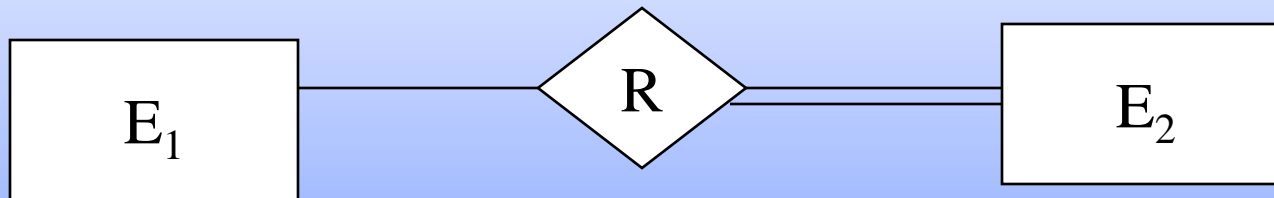


COMPOSITE ATTRIBUTE

# Notasi Utk ER-Diagram

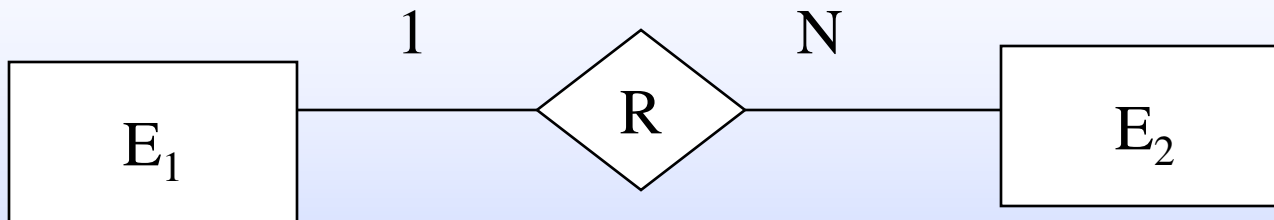


DERIVED  
ATTRIBUTE



TOTAL PARTICIPATION OF  $E_2$  IN  $R$

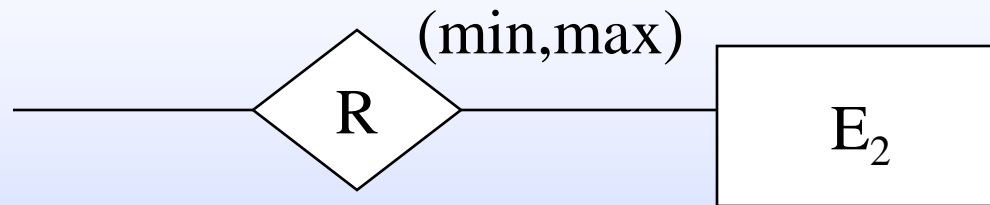
# Notasi Utk ER-Diagram



CATDINALITY RATIO 1:N FOR  $E_1:E_2$  IN R



# Notasi Utk ER-Diagram



STRUCTURAL CONSTRAINT (**min,max**) ON  
PARTICIPATION OF E IN R