

Relationships

Sept 10

Formally: Given n entity sets E_1, \dots, E_n

- a relationship instance is an association between n entities $r = (e_1, \dots, e_n) \forall e_i \in E_i$

- a relationship type defines a format for an association (we will call this R)

- a relationship set is a set of relationship instances of same type

each entity set participates in R

each entity participates in r

~~WORKS = E~~

WORKS_FOR relationship type

E_1 : EMPLOYEE

E_2 : DEPARTMENT

$r_1 = (e_1, d_1)$ relationship instance

$\{r_1, r_2, \dots\}$ relationship set

EMPLOYEE "participates" in WORK_FOR
 e_1 "participates" in r_1

In ER diagram:

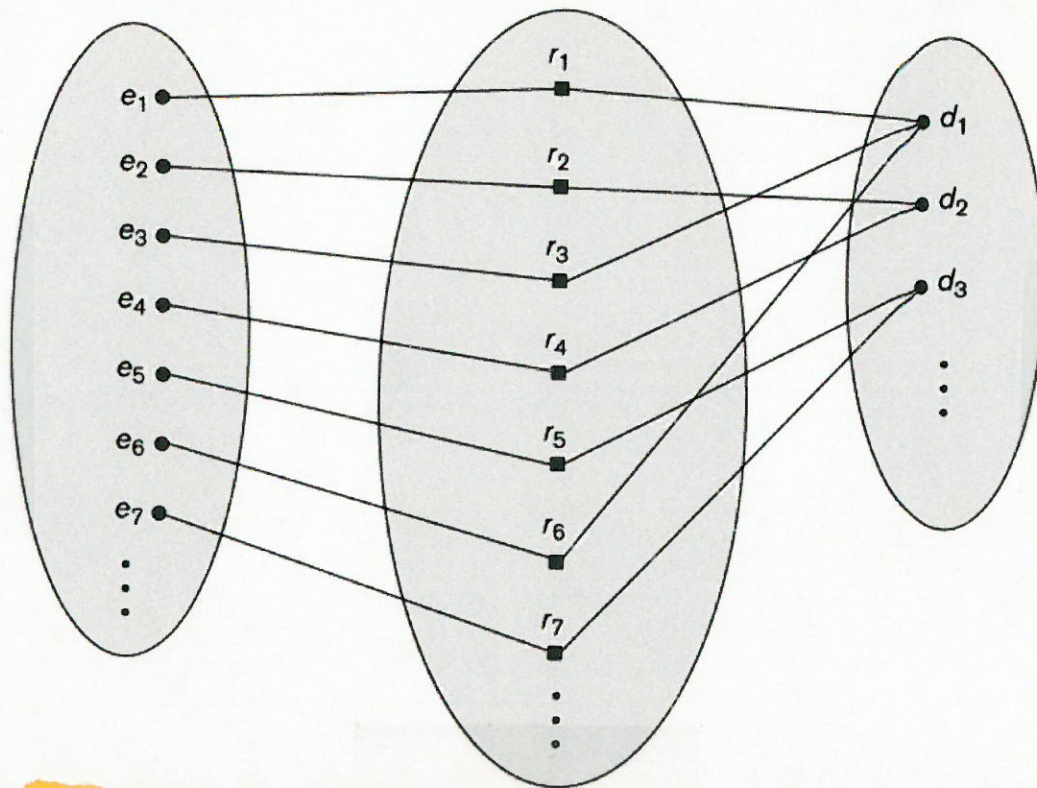
- relationship types: diamonds w/
lines to participating entities



EMPLOYEE

WORKS_FOR

DEPARTMENT



degree of a relationship type:

of participating entity types

- WORKS-FOR is degree 2 (binary relationship)
- SUPPLY is degree 3 (ternary relationship)

