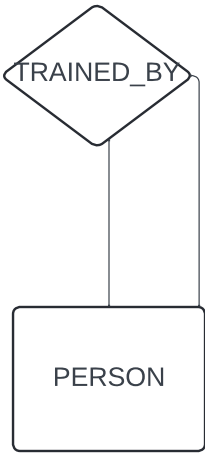


Referential Integrity Constraints

Specify diagrammatically
what the primary keys
are*



Specify diagrammatically
what the foreign keys
are*



A set of attributes FK in a relation schema R1
(PERSON) is a foreign key in R1 if...?

R2 has some attribute
(FK)

R1 (PERSON)

1	160	NULL
2	160	1

- Attribute in R2 has to be in the same domain as the primary key of R1.
- R2 has to reference an existing tuple in R1 or be NULL.

CRUD

Operations on a Database?

Retrievals or Modifications

Domain, Entity Integrity,
Key, Referential Integrity*

R1 (PERSON)

1	160	NULL
2	160	1

INSERT

Inserting tuple t =
<"blah", 160, NULL>

Domain

t = <NULL, 160, NULL>

Entity Integrity

t = <1, 160, NULL>

Key

t = <3, 160, "blah">

Referential Integrity

t = <3, 160, 4>

UPDATE

Update value of weight to
"blah" of tuple with personid
= 1?

Domain

Default behavior -
RESTRICT

Update value of primary key
to NULL of tuple with
personid = 1?

Entity Integrity

Update value of primary key
to 2 of tuple with personid =
1?

Key, Referential
Integrity

DELETE

Delete the tuple with
personid = 1?

Referential Integrity

CASCADE - DELETE,
SET NULL / DEFAULT