



RELATIONAL DATABASES


RESOLVING MANY TO MANY RELATIONSHIPS

OBJECTIVES

- IDENTIFY ATTRIBUTES THAT BELONG TO A MANY TO MANY RELATIONSHIP
- DEMONSTRATE THE STEPS TO RESOLVE MANY TO MANY RELATIONSHIP USING AN INTERSECTION ENTITY
- IDENTIFY THE UID OF AN INTERSECTION ENTITY AND REPRESENT IT IN THE ENTITY DIAGRAM

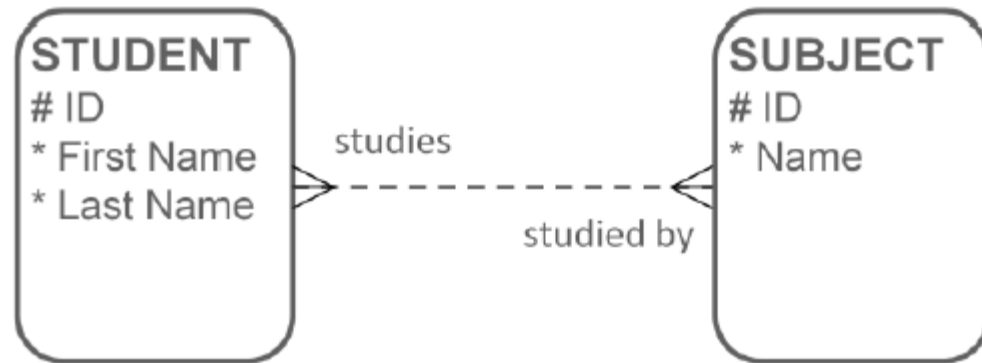


PURPOSE

- RESOLVING MANY TO MANY RELATIONSHIPS HELPS TO COMPLETE YOUR MODEL.
 - IT ALSO HELPS TO DEFINE THE SCOPE OF YOUR DATA MODEL – YOU ONLY MODEL WHAT IS IMPORTANT TO THE BUSINESS
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MANY TO MANY RELATIONSHIP

- IN A COLLEGE A STUDENT MAY STUDY ONE OR MORE MODULES
- EACH MODULE MAY BE STUDIED BY ONE OR MORE STUDENTS



MANY TO MANY RELATIONSHIP

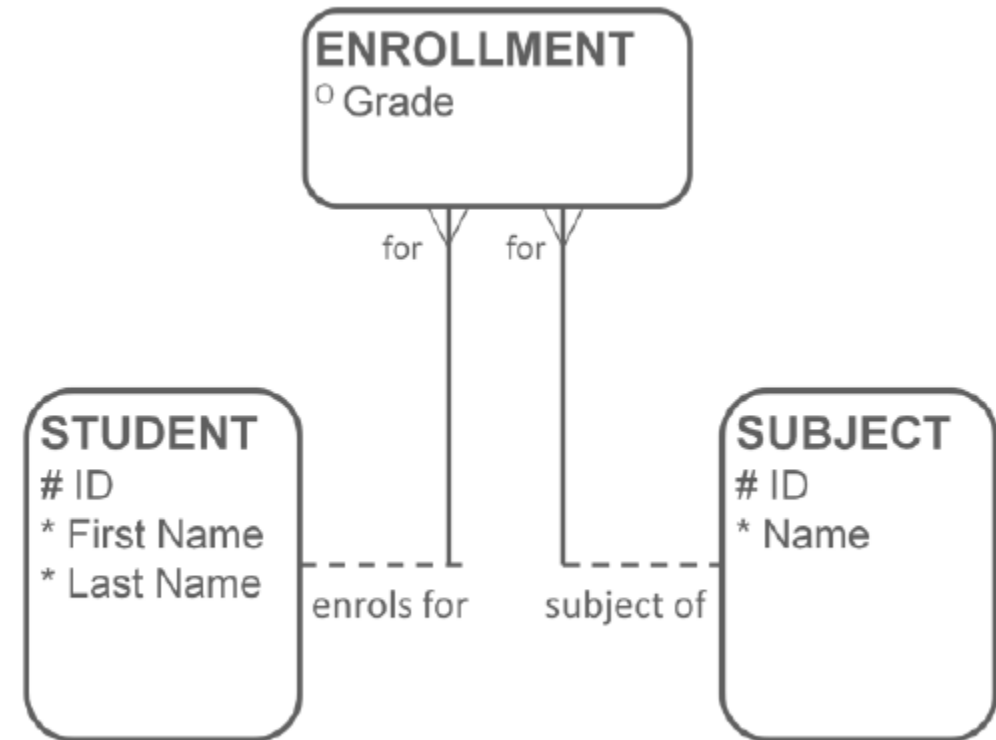
- WHEN A STUDENT REGISTERS FOR A MODULE WE WANT TO BE ABLE TO RECORD THE GRADE THEY ATTAIN FOR THAT MODULE
- WHICH ENTITY WOULD THE ATTRIBUTE “GRADE” BELONG TO?
- IF WE PUT “GRADE” IN THE STUDENT ENTITY, HOW WOULD WE KNOW WHICH MODULE IT BELONGS TO?
- IF WE PUT “GRADE” IN THE MODULE ENTITY, HOW WOULD WE KNOW WHICH STUDENT IT BELONG TO?

MANY TO MANY RELATIONSHIPS

- A THIRD ENTITY IS NEEDED TO RESOLVE A MANY TO MANY RELATIONSHIP
- THE THIRD ENTITY IS WHERE THE NEW ATTRIBUTE(S) IS STORED
- THE THIRD ENTITY IS CALLED AN INTERSECTION ENTITY

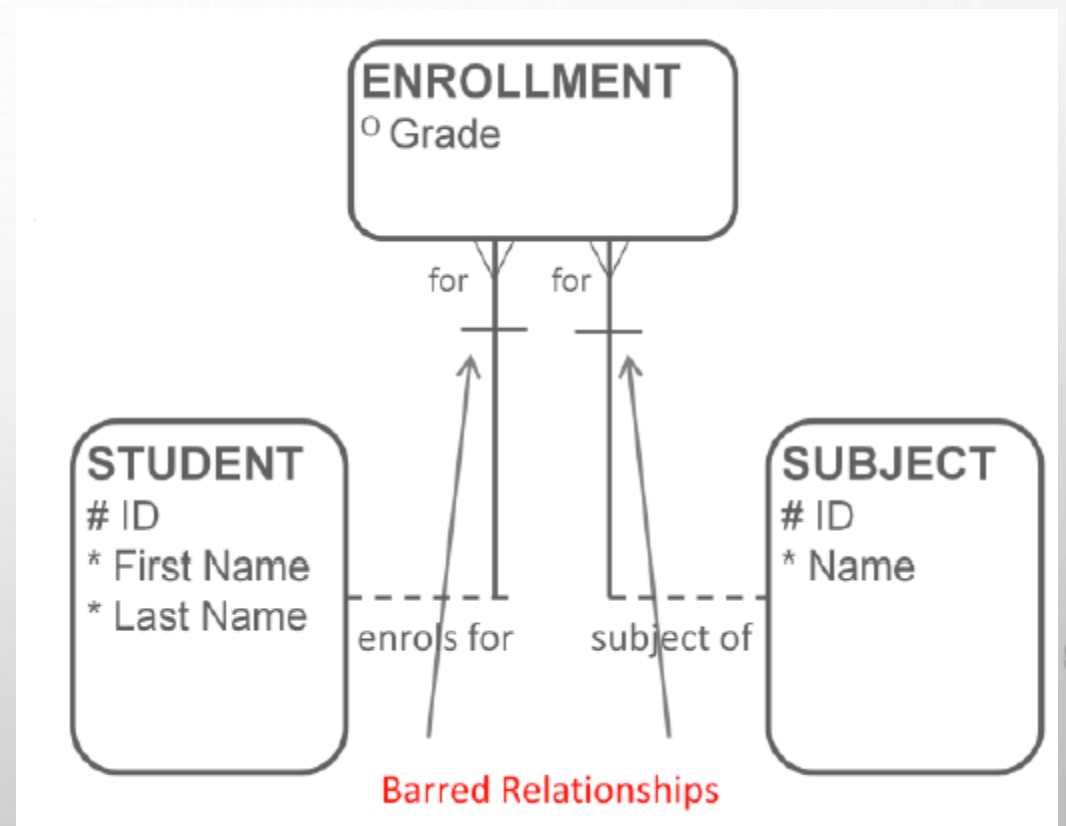
MANY TO MANY RELATIONSHIPS

- AN INTERSECTION ENTITY “ENROLMENT” HAS BEEN ADDED AND A NEW ATTRIBUTE CALLED “GRADE”
- THE ORIGINAL MANY TO MANY RELATIONSHIP HAS BECOME TWO ONE TO MANY RELATIONSHIPS
- WHAT WOULD THE UID BE OF THE INTERSECTION ENTITY?



MANY TO MANY RELATIONSHIP

- THE UNIQUE (UID) OF THE INTERSECTION ENTITY OFTEN COMES FROM THE ORIGINATING RELATIONSHIPS AND IS REPRESENTED BY THE BARS.
- THE RELATIONSHIPS FROM THE ORIGINAL ENTITIES TO THE INTERSECTION ENTITY ARE CALLED “BARRED” RELATIONSHIPS



MANY TO MANY RELATIONSHIPS

- EACH TV SHOW MAY BE WATCHED BY ONE OR MORE PEOPLE
- EACH PERSON MAY WATCH ONE OR MORE TV SHOWS
- EACH EMPLOYEE MAY ATTEND ONE OR MORE TRAINING EVENTS
- EACH TRAINING EVENT MAY HAVE ONE OR MORE EMPLOYEES