RELATIONAL DATABASES

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
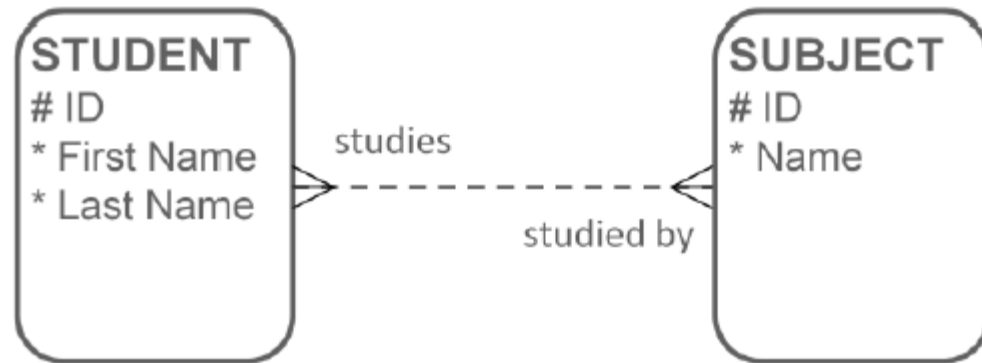
PURPOSE

- 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

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
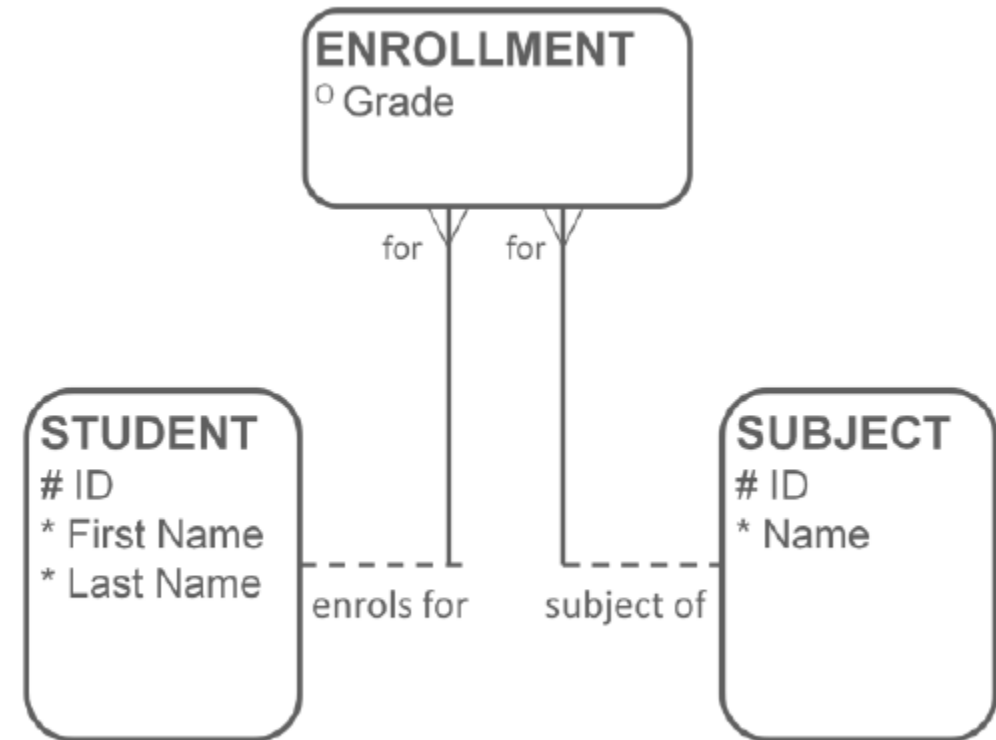
MANY TO MANY RELATIONSHIP

- 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 NEED TO RESOLVE A MANY TO MANY RELATIONSHIP

- THE THIRD ENTITY IS WHERE THE NEW ATTRIBUTE(S) IS STORED

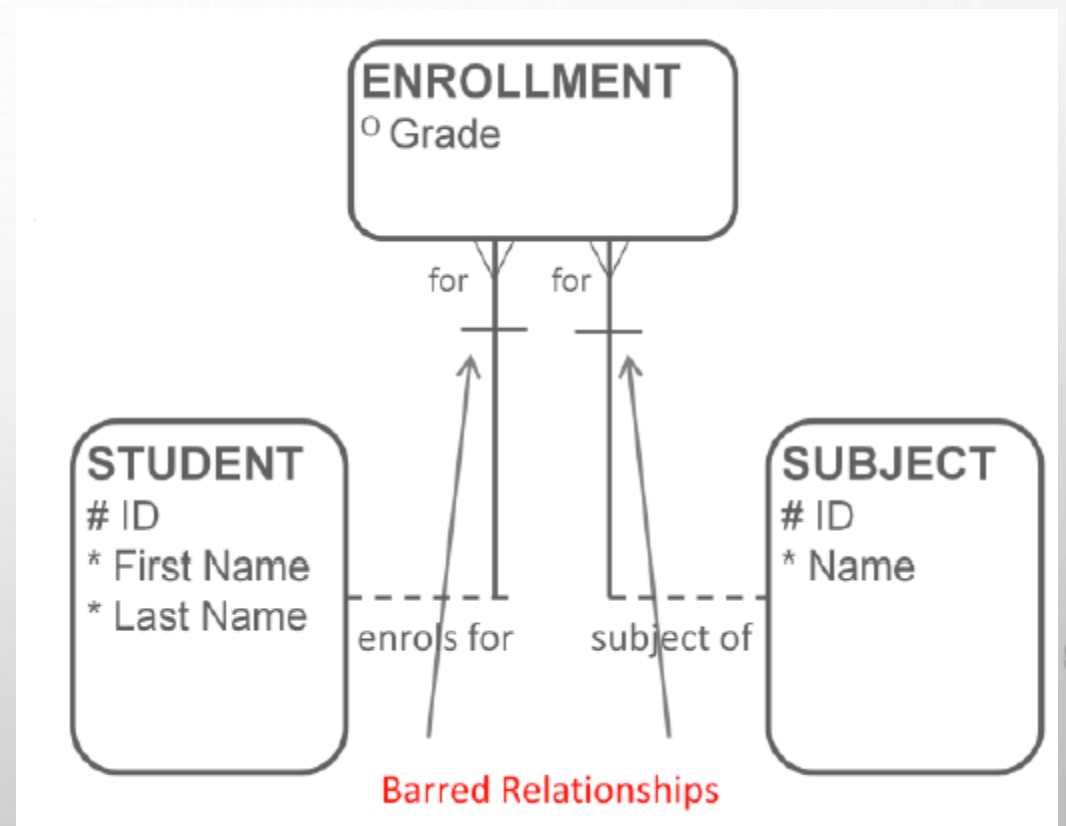- THE THIRD ENTITY IS CALLED AN INTERSECTION ENTITY

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

ENROLLMENT
° Grade

for   for

STUDENT
ID
* First Name
* Last Name

enrols for   subject of

SUBJECT
ID
* Name

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