Database Management Systems

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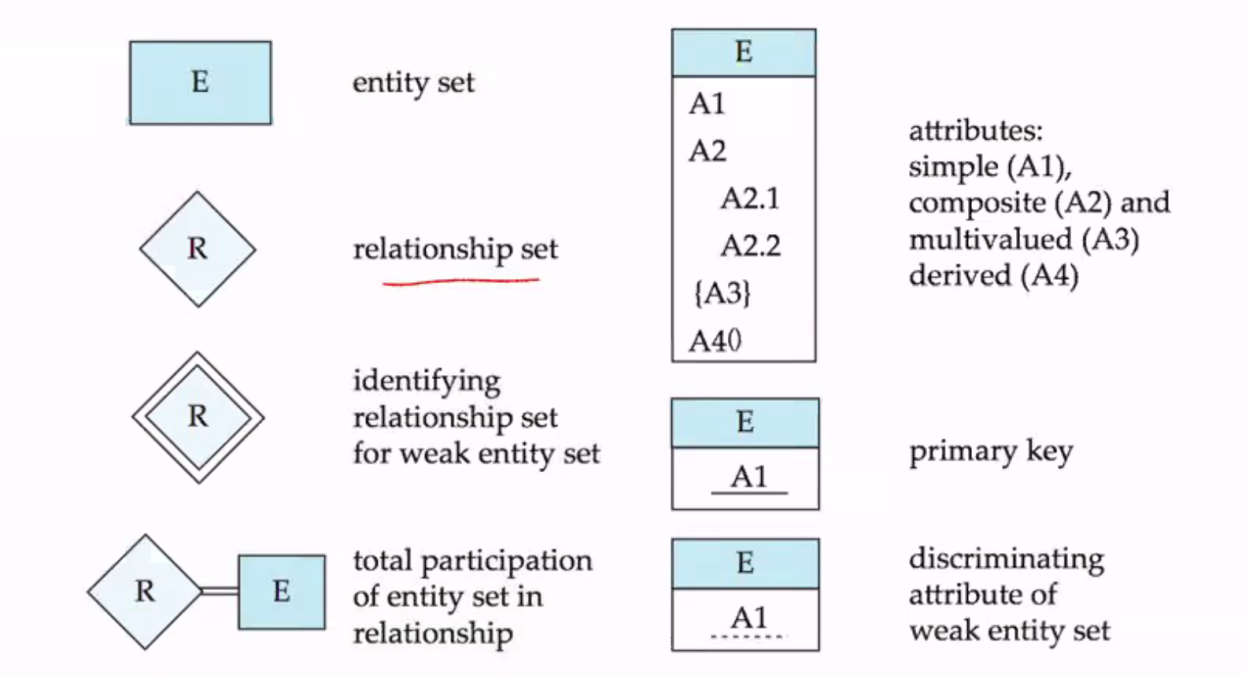
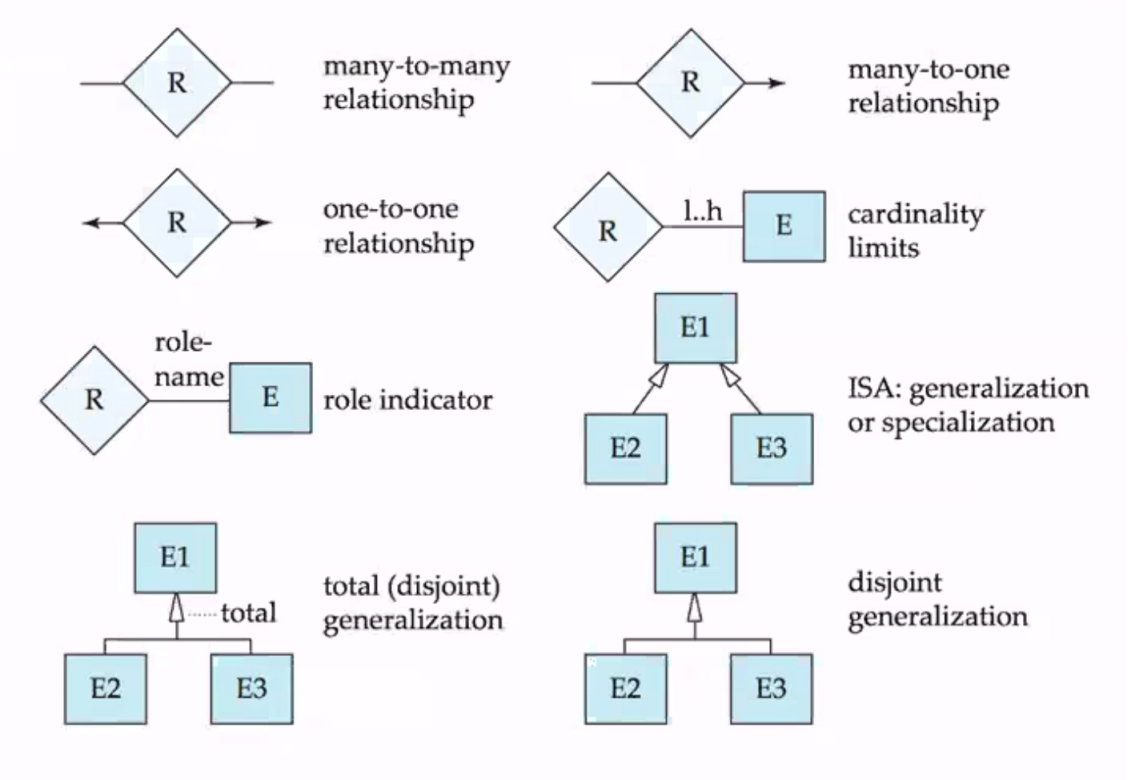
September 16, 2020

Announcements

- Read the group grading policy because it's complex af
  - I looked at it today and it's a little ridiculous tbh
  - We'll grade based on:
    - Group meeting attendance
    - Participation in discussion
    - Completion of tasks

Summary of ER Symbols

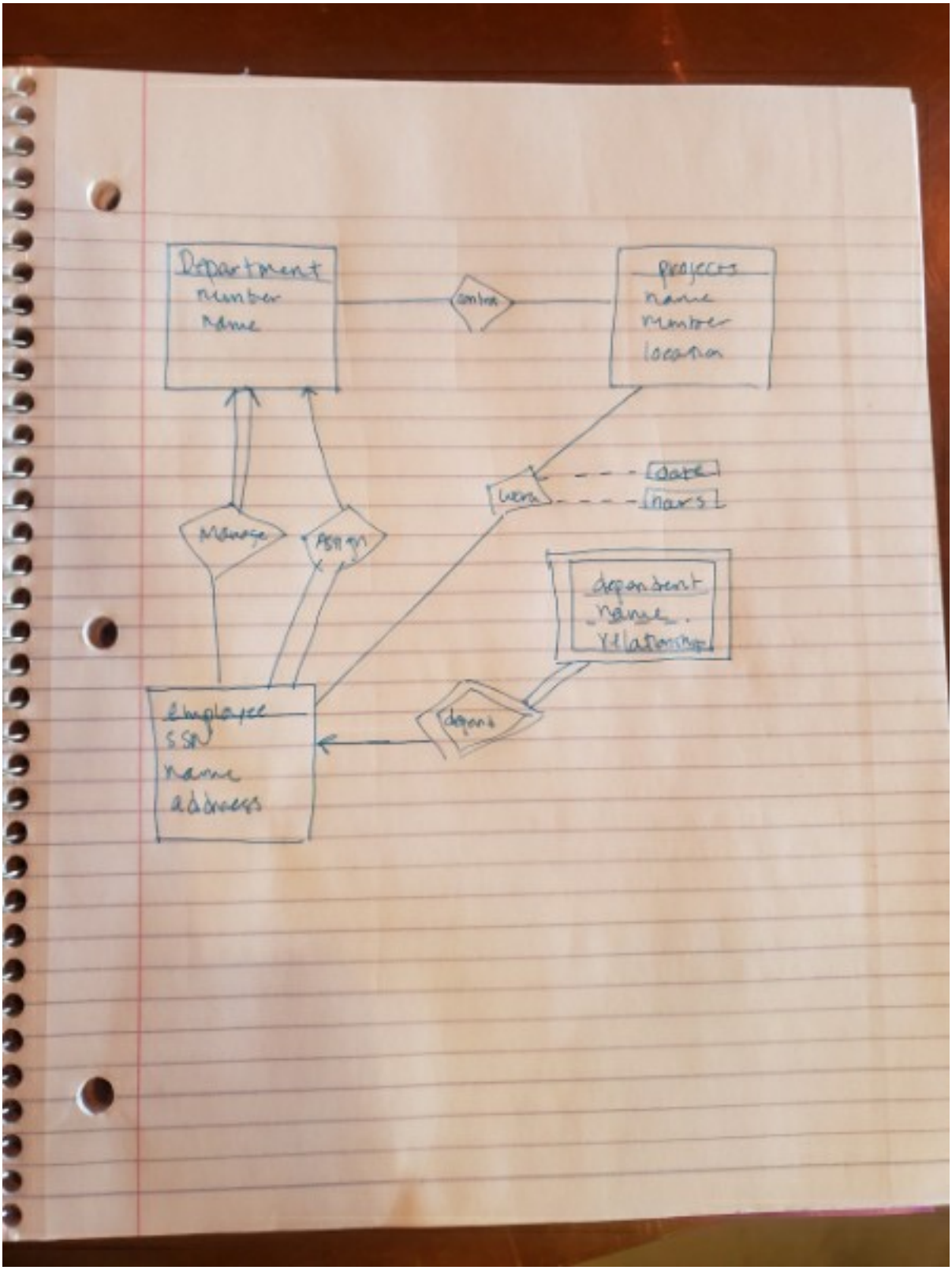




- This is the ER notation that we use for this class, but there are alternative ER notations
- There are Chen, IDE1FX, and others

Example Databse Design

- Nouns are normally attributes or entity sets
- Verbs are normally relationship sets
  - You have to read the problem, but these are good places to start if you're unsure
- You can tell whether or not a noun is an attribute or an entity set based on whether or not it *has* things
  - For example, a department *has a* name and a number, which means that it's an entity set with those attributes
  - Sometimes you'll see a noun that looks like an attribute, but it's actually an entity set. You can tell it's an entity set because:
    - there is some verb representing a relationship between the two
    - there are attributes listed for the noun that looked like an attirubte
- The actual example:
  - A company is organized into departments. Each department has a name and a number, and an employee who manages the department. A department controls a number of projects, each of which has a name, number, and location. Each employee has a name, social security number, and address. Each employee is assigned to one department but may work on several projects. The database also keeps track of the number of hours per week an employee works on the project, and dependents of employees. Each dependent has a name and relationship.


Department
number
name
projects
name
number
location
hours
dependent
name
employee
SSN
name
address