Conceptual design   Sept 5

- requirements collection:
   * data requirements
   * functional requirements
   * techniques: scenarios, sequence diagrams

[- conceptual design: requirements ~~generate~~
                                            generate ER-digram
      - conceptual schema: unambiguious
         * entity types, relationships, constraints
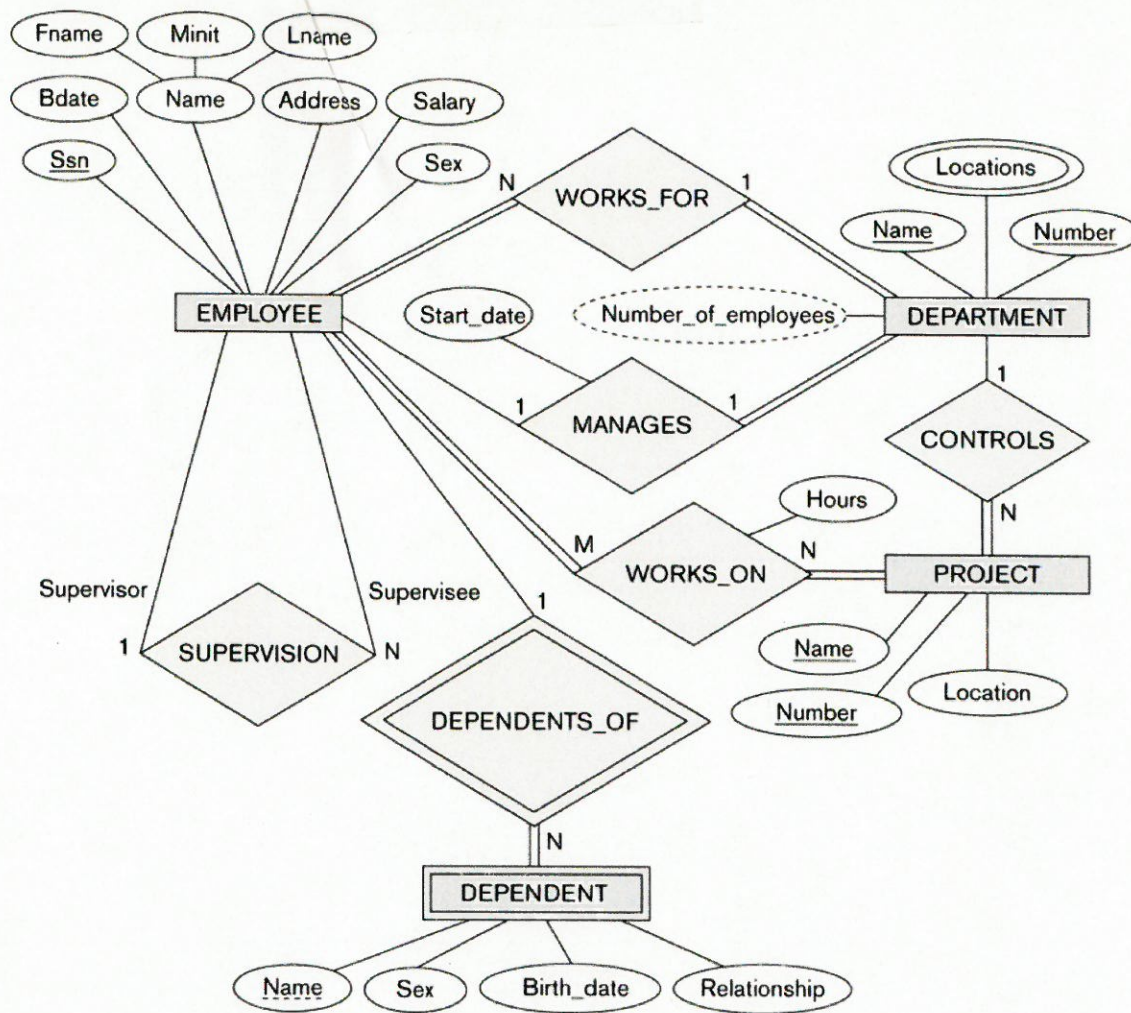   NO IMPLEMENTATION DETAIL

- logical design: implement in DBMS
- physical design: data stored on disk

name: COMPANY

Assume requirements:

- organized into departments

- each department:
  unique name, unique id, one manager,
  date that the manager begins, location (maybe many)

- departments control many projects

- each project:
  unique name, unique number, one location

- each employee has:
  name, SSN, address, salary, gender, birthdate
  supervisor
  - in one department
  - may work on several projects
    (projects may be in other departments)
  - track # of hours/week per project
- dependents of each employee:
  first name, gender, birthdate, relationship
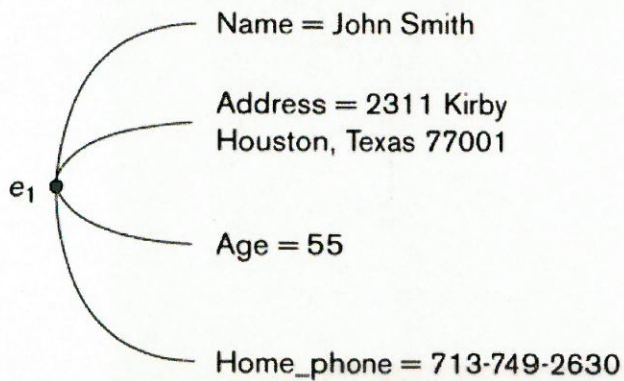
EntitAttributes

entity or object in real world
   independent existence

att properties that describe
   the entity

EMPLOYEE

e_1

- Name = John Smith
- Address = 2311 Kirby
  Houston, Texas 77001
- Age = 55
- Home_phone = 713-749-2630

COMPANY

c_1

- Name = Sunco Oil
- Headquarters = Houston
- President = John Smith