

Draw ER diagram for following cases

1. Suppose you are given the following requirements for a simple database for the National Football League (NFL):
 - the NFL has many teams,
 - each team has a name, a city, a coach, a captain, and a set of players,
 - each player belongs to only one team,
 - each player has a name, a position (such as left wing or goalie), a skill level, and a set of injury records,
 - a team captain is also a player,
 - a game is played between two teams (referred to as host_team and guest_team) and has a date (such as May 11th, 2021) and a score (such as 4 to 2).

Perform the following activities:

- a. Construct a clean and concise ER diagram for the NFL database.
 - b. Construct appropriate tables for the above ER Diagram
2. A university registrar's office maintains data about the following entities:
 - courses, including number, title, credits, syllabus, and prerequisites;
 - course offerings, including course number, year, semester, section number, instructor(s), timings, and classroom;
 - students, including student-id, name, and program;
 - instructors, including identification number, name, department, and title.
 - Further, the enrollment of students in courses and grades awarded to students in each course they are enrolled for must be appropriately modeled.

Perform the following activities :

- a. Construct a clean and concise ER diagram for the registrar's office.
 - b. Construct appropriate tables for the above ER Diagram
3. Construct an ER Diagram for Company having following details:
 - Company organized into DEPARTMENT.
 - Each department has unique name and a particular employee who manages the department.
 - Start date for the manager is recorded.
 - Department may have several locations.

- A department controls a number of PROJECT. Projects have a unique name, number and a single location.
- Company's EMPLOYEE name, ssno, address, salary, sex and birth date are recorded.
- An employee is assigned to one department, but may work for several projects (not necessarily controlled by her dept).
- Number of hours/week an employee works on each project is recorded; The immediate supervisor for the employee.
- Employee's DEPENDENT are tracked for health insurance purposes (dependent name, birthdate, relationship to employee).

Perform the following activities:

- a. Construct a clean and concise ER diagram.
- b. Construct appropriate tables for the above ER Diagram