In-class exercise - CHAPTER 5 (Advanced Data Modeling)

Considering the following business scenario, create a Crow’s Foot ERD using a specialization hierarchy if appropriate.

Granite Sales Company keeps information on employees and the departments that they work in. For each department, the department name, internal mail box number, and office phone extension are kept. A department can have many assigned employees, and each employee is assigned to only one department. Employees can be salaried employees, hourly employees, or contract employees. All employees are assigned an employee number. This is kept along with the employee’s name and address. For hourly employees, hourly wage and target weekly work hours are stored (e.g. the company may target 40 hours/week for some, 32 hours/week for others, and 20 hours/week for others).

Some salaried employees are salespeople that can earn a commission in addition to their base salary. For all salaried employees, the yearly salary amount is recorded in the system. For salespeople, their commission percentage on sales and commission percentage on profit are stored in the system. For example, John is a salesperson with a base salary of $50,000 per year plus 2-percent commission on the sales price for all sales he makes plus another 5 percent of the profit on each of those sales. A list of clients, with their name, address, and phone number, is stored for each salesperson, and salespeople often serve their clients as a team (a salesperson can be a part of multiple teams). For contract employees, the beginning date and end dates of their contract are stored along with the billing rate for their hours.