Lab 9

Grace Hopper Consulting

Grace Hopper Consulting (GC Inc) is a consulting company. Create the ER diagram for the GC Inc Operations Database based on the following requirements.

The GC Inc Operations Database will keep track of the information about consultants, contract managers, customers, supervisors, and contracts.

- For each consultant, the database will keep track of a unique consultant id, the consultant's first name and last name, one or more skills, the start date with the company, and the number of years with the company.
- For each contract manager, the database will keep track of a unique manager id, and the manager's first name and last name.
- For each customer, the database will keep track of a unique customer id, the customer's name composed of customer's first name and last name, and exactly two phone numbers: one cell phone number, and one home phone number.
- For each supervisor, the database will keep track of a unique supervisor id, the supervisor's first name and last name, the number of contracts supervised, and the number of GC Inc stocks owned if the supervisor owns the company stock. Not every supervisor owns GC Inc. stock.
- For each contract, the database will keep track of a contract id and a contract start date. Two or more contracts can have the same contract id. But all contracts for the same customer have different contract ids.
- Each contract is managed by exactly one contract manager. Each contract manager manages at most one contract and does not have to manage any contracts.
- Each consultant is assigned to exactly one contract. At least two consultants must be assigned to each contract.
- Each customer must have at least one contract and can have many contracts. Each contract is associated with exactly one customer.
- Each contract is supervised by exactly one supervisor. Each supervisor must supervise at least one contract and can supervise up to ten contracts.
- Each consultant may be assigned as an administrative helper for multiple supervisors but does not have to be an administrative helper. Each supervisor must get at least one administrative helper and can have multiple helpers. The database will keep track of the number of hours per week each consultant works as a helper for a particular supervisor.
- Each consultant may be a mentor for at most four other consultants but does not have to be a mentor. Each consultant may be mentored by one other consultant but does not have to be mentored by anyone.