

Normalization Assignment (20 points)

Your task is to construct an E-R diagram and the resulting normalized tables to solve the scenario below. You should present your results beginning with a Conceptual ERD (your initial impression of the scenario) and the corresponding Dependency Diagrams. From this continue to normalize until you have a complete set of related tables.

Your task is to develop the database design for a small company's personnel office. They would like to be able to track the assignment history of their employees as well as capture required bio-demographic data. Data must be captured to identify employees (name, address(s), gender, contact information, DOB, salary), jobs (title, description), and departments (code, description, contact information).

They also need the ability to report on:

*Department Staffing
Employee breakdown by city/state
Assignment history
Vacant jobs*

Hints:

- Begin by taking the point of view of the employee
 - Employee Jobs (1:M)
- Take a top-down approach; start with E-R and move to attribute definition
- Look for partial and transitive dependencies
- Remember to make attributes as atomic as possible
- Feel free to add any attributes you think are necessary

Requirements:

In this assignment, you are responsible for the following:

- E-R diagram based on your initial view of the database
- Dependency diagram(s) showing your entity definition
- Entity definition; list all fields, primary key, and foreign keys
- E-R diagram based upon your final ("*normalized view*") of the database