

## X402.5: Instructions for Assignment 3

Using the instructor's solution for Assignment 2, design a physical data model for the Customer and Human Resource subject areas (the entities shown in Green and Violet on the ER Diagram). In particular, note the following:

1. Your solution should include an ER diagram showing tables and relationships, and an indication of the columns included in each table (either with attributes listed on the ER diagram or in separate lists).
2. Ignore entities from other subject areas except for inclusion of inherited foreign keys. The parent entities and relationships do not need to be shown in your solution.
3. Choose what you believe is the best way to implement the supertype/subtype of Party, Individual, and Organization. Organization is necessary because some customers are companies rather than individuals (not shown in the Assignment 2 user views), but it is up to you to determine the best way to implement customers who can be either individuals or companies.
4. Choose whether you wish to implement the association of Individuals to Employment as a direct relationship or using a role. The role alternative is shown in the Instructor's solution, but that doesn't in any way mean you have to use this technique.
5. Feel free to be creative if you have some ideas from your solution that you like better than mine, but everything in your solution must be in 5<sup>th</sup> normal form with the exception of simple lookup values. For example, you don't have to make tables for State and Zip Code.
6. List any indexes you would recommend on alternate keys and search keys, and whether they are unique or not.