## CIS 310-50 Fall 2021

## **Assignment #5**

## 40 points

- 1. Work Problem 3, page 189 from your textbook. Implement the Crow's Foot Extended Entity Relationship Diagram (EERD) in Visio.
- 2. For additional symbols/shapes that are needed for the ERD click on More Shapes, choose Software and Database from the pulldown menu, select Database on the pulldown menu, and mark Crow's Foot Database Notation, Entity Relationship, and/or Object Relational.
- 3. Create and name the required entities. Define and name the attributes for each entity using the standard naming convention. Define the <u>PK(s)</u>. Define the <u>FK(s)</u>, where appropriate. Establish the relationships between entities. Use verbs and do <u>not</u> write the business rules on the diagram. Determine whether a relationship between a pair of entities is identifying (solid line) or non-identifying (dashed line) and whether participation in the relationships is mandatory and optional. Also, show <u>connectivities</u> and cardinalities on the diagram.
- 4. Note that there are three categories of Employees: Salaried, Hourly, and Contract. Also, note that some Salaried Employees are Salespeople. Label the EERD appropriately.
- 5. The solution to Problem 7, p. 190, posted in the Assignments/Assignments folder and in the Course Documents/Week 7: Oct 4-10 may be helpful. Also, read Chapter 5 thoroughly as the examples presented in this chapter will be helpful as well.
- 6. Save the diagram in a A5\_Your\_First\_Name\_Your\_Last\_Name.vsdx file on the J drive. For example, A5\_John\_Brown.vsdx. Also, save it as A5\_John\_Brown.png or A3\_John\_Brown.pdf. Submit the .png or .pdf file to Blackboard by the due date.