**IT 340**

**Assignment 2**

**100 Points**

**Due date: February 25, 11 pm**

**Instructions:** Complete the following exercises. Zip the Word (IT340\_YourLastName\_Assignment2.docx, the Access file ((IT340\_YourLastName\_Assignment2.accdb), and the PDF file (IT340\_YourLastName\_Assignment2.pdf) Upload the zipped folder (**IT340\_YourLastName\_Assignment2.zip**) in D2L.

The students will work on this assignment during the class.

Two-Bit Drilling Company keeps information on employees and their insurance dependents. Each employee has an employee number, name, date of hire, and title. If an employee is an inspector, then the date of certification and the renewal date for that certification should also be recorded in the system. For all employees, the Social Security number and dependent names should be kept. All dependents must be associated with one and only one employee. Some employees will not have dependents, while others will have many dependents.

1. Create a data model using the specialization hierarchy. Save the ERD as a PDF. State your assumptions about business rules in a Word document. (50 points)
2. Create the 3NF tables and relationships in Access. The Word file should provide your rationale for each normalized form. State your assumptions about business rules, if any. (50 points)

Did your 3NF tables accurately reflect the initial ERD? If not, modify the initial ERD.

Submit both ERDs.

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