

## **Assignment #4**

### **Data Modeling and the Entity Relationship Model**

**Purpose:** To demonstrate the ability to understand the purpose and role of a data model and construct ERDs that represent relationships, minimum, and maximum cardinality using Crow's foot modeling techniques.

#### **Instructions:**

Using the Queen Anne Curiosity Shop in the back of Chapter 4 (p 315-316), complete items A-E. Use IE Crow's Foot modeling for the ERDs requested in this case.

- ☐ A. Draw an E-R data model for the QACS database schema shown in Chapter 3's QACS Project Questions. Use Crow's foot notation for your E-R diagrams. Justify the decision you make regarding minimum and maximum cardinality.
- ☐ B. Extend and modify the E-R data model in letter A by strictly following the instructions provided in the case.
- ☐ C. Extend and modify the E-R data model letter A by strictly following the instructions provided in the case.
- ☐ D. Combine the E-R database models from parts B and C to meet all of the QACS project new requirements, making additional modifications as needed. Use Crow's foot notation for your E-R diagrams.
- ☐ E. Describe how you go about validating your data model in part D.
- ☐ Save each data model with a unique filename and convert each to an image file. Create one single document by identifying each solution and placing the corresponding ERD in the proper section. Convert the document as a pdf file, save, and submit.