## **Assignment 1.4 – Data Models**

- 1. Translate the following business rules into an object relational diagram (ORD) using UMLet (See the above Object Relational Diagram examples)
  - a. a USER has many ROLES
  - b. a USER has one BIRTHDATE
  - c. a USER can have many DEPENDENTS
- 2. Convert the translated diagrams into NoSQL data structures (see pages 15-18)
- 3. Save the ORD and NoSQL data structure as separate image files
- 4. Create a new directory in your personal portfolio repository and name it "nosql-data-diagrams"
  - a. All data diagrams created in this course will be added to this directory as image files.
- 5. Create a new directory in your personal portfolio repository and name it web-335
- 6. Add a new menu item to the index.html page for "diagrams"
  - a. Make sure the links are bi-directional. If the user selects a link they should be taken to the diagram and have an option to navigate backwards (without hitting the back button).
  - b. Remember you are building a personal brand to display your skills and establish a strong market presence. Keep the navigation simplistic, professional, and identifiable.
- 7. Create an HTML page and name it "yourLastName-diagrams"
- 8. Add the HTML page to your web-335 directory
- 9. The HTML page must include
  - a. Styling to mirror the index HTML page (base css styles)
  - b. An image gallery with selectable/expandable images
- 10. Combine the images in a single word document and include your name, date, and assignment

The images you create in this course (where instructed) will be added to your "yourLastName-diagrams.html" page as gallery items.

Pure HTML: <a href="https://www.w3schools.com/cSS/css\_image\_gallery.asp">https://www.w3schools.com/cSS/css\_image\_gallery.asp</a>
Bootstrap: <a href="https://www.w3schools.com/bootstrap/bootstrap\_carousel.asp">https://www.w3schools.com/bootstrap/bootstrap\_carousel.asp</a>