



Dalhousie University
Faculty of Computer Science

CSCI 2141 – Intro to Database Systems

Week 2 – Data Modelling
IN-CLASS EXERCISES

Exercise 1 – Individual

United Broke Artists (UBA) is a broker for not-so-famous painters. UBA maintains a small network database to track painters, paintings, and galleries. A painting is painted by a particular artist, and that painting is exhibited in a particular gallery. A gallery can exhibit many paintings, but each painting can be exhibited in only one gallery. Similarly, a painting is painted by a single painter, but each painter can paint many paintings.

- What tables would you create, and what would the table components be?
 - How might the tables be related to one another?
 - Using the ERD from part (b) above, create the relational schema that should include appropriate attributes for each entity.
 - Ensure the use of appropriate naming conventions to name the attributes
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Exercise 2 – Groups of 2

You are asked to design and create a database for an online cottage reservation system for “Tourista Nova Scotia”, a company that own cottages across several Regions of Nova Scotia, including Halifax. The company owns several cottages in some regions, but does not have a presence in all regions of the province. Each cottage may provide additional facilities like internet, coffee machine, or a small kitchen. However, certain facilities like pools, gyms and kids’ play areas are shared by many cottages. Rent prices for these cottages vary according to the type of facilities, location, and the time of the year, and are grouped into different price bands. Clients can book one or more cottages at a time.
