**Requirements for Data Model**

Your database that you model shall consist of 4 related database tables (as specified below).

**IMPORTANT:** Do not use any SQL KEYWORDS as table names or field names. Google "SQL keywords" to see what to avoid, but you definitely cannot use these: user, role, password, grant, date... You will get Homework deductions, but more importantly, you will have problems as you attempt to implement your web application.

1. **A user table and user role table.** I will be giving you sample code during the semester and my code will expect your table to have the exact design as shown below (table name, field names, field types and other designations under the checkboxes like PK primary key, NN not null, etc). Using the MySql Data modelling tool, create a foreign key from web_user.user_role_id to user_role.user_role_id. Note: your web application will not allow users to modify the user_role table – you (as developer/designer) will enter the records into this table using MySql workbench (in next week’s homework).

   ![Table Screenshot](image1)

2. **An "other" table** named according to what you will store in it (can't be named "other") and including these fields:
   - auto-increment primary key (to uniquely identify a particular "other" record),
   - descriptive character field (must be unique – add database constraint),
   - **At least two more fields** (you choose), **one of which must be a null-able non-character field** (e.g., date, decimal, or integer). Null-able means that it is OK for the user to not put something into that field (optional for the user).
     - Decimal is a good choice for money type fields.
     - Pick Date over DateTime or else you will get an unintelligible real number that stores milliseconds form the beginning of time.

   ![Table Screenshot](image2)
3. An **associative table** that implements a "many to many" relationship between your user table and your "other" table. This table shall be named according to what you will store in it (can't be named "associative"). If you think of your user table as the subject of a sentence and the "other" table as the object of the sentence, then your associative table describes the verb within the sentence. Attributes might be something like "number of items purchased", "when purchased", "discount amount", etc.
   - auto-increment primary key (to uniquely identify a particular associative record),
   - foreign key that references the user table,
   - foreign key that references your "other" table,
   - **At least two more fields** (you choose), **one of which is a null-able non-character field** (e.g., date, decimal, or integer).
     Null-able means that it is OK for the user to not put something into that field (optional for the user).

4. **Naming conventions**:
   - Every table shall have a **PK** that is named: tableName_id
   - All FKs shall be named tableName_id (referring to the tableName that they are pointing to)

5. **Somewhere in your user table and/or your “associative” table** shall be the following:
   - **at least one optional Date type field**, (e.g., you didn't click "Not Null" in the Table Design Screen).
   - **at least one optional Decimal** (usually a money amount, don’t click "Not Null") or an **optional integer**.
   - **at least one LongText**.