

CS-3200 Homework 2

This assignment provides an opportunity to explore the functionality provided by MySQL workbench. In particular:

- Use MySQL workbench to import databases that will be used in class for demonstration purposes
- Answer questions on the results of the commands in the script as well as some simple queries.
- Build a model from an existing database.
- Export an existing database.

This assignment ensures that MySQL server and the workbench is working on your laptop. If you are having trouble with MySQL Server or the Workbench please use the TA office hours to solve the issues. After this assignment you are responsible for MySQL administration on your laptop.

- 1) Create a collection of databases from the `create_databases.sql` script. This script creates the databases that are used in the Murach's MySQL book. Load the `.sql` script into the SQL workbench editor window (File→'Open SQL Script'). This will give you an opportunity to read the `create_database.sql` script as well as execute the script (execute is the lightning rod icon in the workbench). Review action output response to verify that the command ran successfully. Make sure you can differentiate between success messages, warnings and error messages. If you do not have enough memory to load the script into the editor, import the script using the import tool (Server→'Data Import'). When importing specify that the script is a self-contained import file. Read the script using your favorite editor. Familiarize yourself with the databases and the tables.
- 2) Answer the following questions on the newly created databases. These answers can be determined by reading the results in the Output window, investigating the tables using the *i* icon listed in the navigator panel next to the table or by writing simple queries. Include the answers to questions a-d inside a comment within a file called `hwk2problem2lastnamefi.sql`, where `lastname` is your lastname and `fi` is the initial for your firstname: (60 points)
 - a. How many databases are created by the script?
 - b. List the database names and the tables created for each database.
 - c. How many records does the script insert into the `om.order_details` table?
 - d. What is the primary key for the `om.customers` table?
 - e. Write SQL queries to answer the following questions on the `om` database. Include a comment that specifies the problem number before each SQL statement i.e. 2.f, 2.g
 - f. Select all fields from the table `orders`
 - g. Select the fields `title` and `artist` from the `om.items` table
- 3) Create a model for the `om` database. You can get to the modelling tool from either the 'Database'→'Reverse Engineer' menu item or from the main home window on My SQL workbench. Familiarize yourself with the different shapes found within the model diagram. Save

the model to a file named hwk2problem3lastname.fi.mwb and export the model as a pdf file named hwk3problem3lastname.fi.pdf. (20 points)

- 4) Export the om database as a self-contained file using the tool (Server→'Data Export'). Make sure you include the 'Create Schema' as part of the dump. Name the file hw2problem4lastname.fi.sql (10 points)

Homework submission

Create a zip file named hwk2lastname.fi.zip that contains the following files :

- hwk2problem2lastname.fi.sql
- hwk3problem3lastname.fi.pdf
- hw2problem4lastname.fi.sql

Submit the zip file to blackboard.