

CS4380/7380 Spring 2016 Project 1

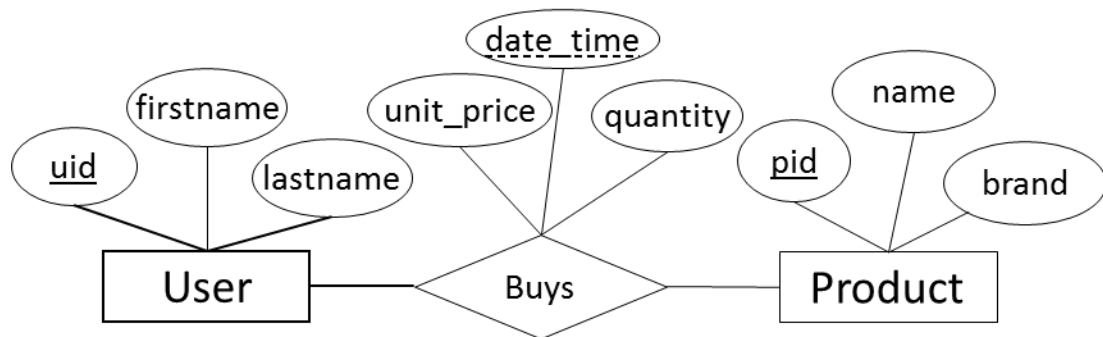
Simple Table Creations and Queries

Due: 2/9/2016 by 9:30am

Perform all of the instructions below on your MySQL database on Azure. The project will be graded in two parts. You will make a MySQL dump file of your database after performing the activities below, and submit this to Canvas. You will also need to submit a pdf version of your report to the Canvas site containing responses to the numbered activities.

In your MySQL account, create a new database called “project1”. Use this database for the activities below. The separate database is to facilitate grading, as it will allow you to easily send us the tables used in this assignment and not any tables that are already in your database.

Create tables to denote the relationship between users and products as described in the ERD below. Assume that a user can buy any number of products at a single date/time (including any positive whole quantity of the same product), and that a product can be purchased by any number of users at the same date/time. In addition to the three tables necessary for the ERD, add a hierarchy to Product, as a Product can be a Clothing (with attributes of *target_gender* and *rating*), a Food (with the *type* attribute), or neither (but not both).



Load the provided CSV files into the tables you just created (hint: When entering the mysql shell, use the command `mysql --local-infile=1 -h localhost -u root -p` This will allow you to use `LOAD DATA LOCAL INFILE` statements).

Provide the responses to the following instructions on your report:

1. Draw an ERD representing all of the tables and include this in your report. Be sure to indicate key and participation constraints, as well as the covering and overlapping constraints for the hierarchy.

2. Use a MySQL command to describe the “User_Buys_Product” table (you do not have to name it exactly this). In your report, state the command used and the output given by MySQL.
3. Write simple queries to list all tuples and attributes (columns) from the tables. In your report, state the commands you used (not the output).
4. Delete a user and report the change(s) in the “User_Buys_Product” table.
5. Add the deleted tuple (from #4) back to the User table and report what will happen. If some issues arise, describe your approach to handle the issues and make the contents of all tables the same as they were before deleting the user.

Once you are done with these Project 1 activities, quit the mysql shell and use the following command to make a MySQL dump file of your database, which you will turn in. Note that the “cs4380” is the name of the database in your mysql server. If your database is called something else, replace “cs4380” with your database name.

```
mysqldump -h localhost -u root -p cs4380 > PAWPRINT_project1.sql
```

On the Canvas site, navigate to Modules > Assignments > Project 1. Click “Submit Assignment”. There you will upload two files:

PAWPRINT_project1.sql	MySQL dump file containing all tables for this assignment
PAWPRINT_project1.pdf	PDF file containing the responses to the 5 numbered activities