

HW 2. DB Design and Implementation

Submission Instructions

- Include your name on your solution.
- Submit by 11:59PM 06/07 on BlackBoard as a .txt, .sql, or PDF file.
- Optionally, you may include a brief description of the assumptions you made if clarifications are necessary

Assignment

Provide the table definitions and insert data for the UML diagram in HW1. Use the HW1 solution as a reference: <http://goo.gl/U5eJ0Z>. Apply the concepts from the Database Design lecture: <http://goo.gl/bwSmCv>.

Part 1.

Use the appropriate data types for the attributes. Make reasonable assumptions. For example, we can assume a user's username, password, first name, and last name each do not exceed 255 characters (I.E. `VARCHAR(255)`).

Do not create a separate table for the enumeration `CuisineType`. Instead, use the `ENUM` data type.

For the `Created` column in the `Reviews` table, specify the default as the current timestamp. Also consider this constraint: a user can write only one review for a given restaurant.

Be sure to include constraints in the table definitions, when applicable. In the solution for HW1, the primary keys are underlined. Also notice the specification of surrogate keys, which should be automatically incremented. The referential integrity and life cycle dependencies from the UML should be properly expressed in constraints.

This assignment does not require the definition of any triggers.

Use multi-table inheritance to model `Restaurants`, `SitDownRestaurant`, `TakeOutRestaurant`, `FoodCartRestaurant`.

Notes:

- Include "DROP TABLE IF EXISTS" statements at the top. These must be in the correct order, respecting referential integrity.
- "CREATE TABLE" statements must be in the correct order, respecting referential integrity.
- This means I should be able to run your "script" any number of times (the first time will create tables, and subsequent runs will drop and then create tables).

Part 2.

Insert at least two records into each table (except for CreditCards) using “INSERT INTO ... VALUES ...” statements. (Note: it would be nice to insert at least five Restaurants records to cover all CuisineType enumeration values, although only two are required.)

Create a csv file, “creditcards.csv”, that contains at least two rows representing the credit card info for one of your users. Then use a “LOAD DATA INFILE ... INTO TABLE ...” statement to load the csv file. Include the contents of the csv file in your submission.

Notes:

- “INSERT INTO ... VALUES ...” statements must be in the correct order, respecting referential integrity.
- Include the “LOAD DATA INFILE ... INTO TABLE ...” statement after all the “INSERT INTO ... VALUES ...” statements.
- I should be able to run your data insertion script after creating the tables.