CSE 305 -- Principles of Database Systems

Spring 2017

Database Programming Project Assignment Part 2

Out: 27 February 2017
Due: 22 March 2017, 4:00pm, one per team

In this assignment you are to create and test all the SQL DML statements that you will need to implement your on-line movie rental system. You should therefore once again carefully read the Requirements Specification document available on the course web site. In Section 3 of that document, all of the transactions that the system is required to support are detailed. For each of these transactions, you should create an SQL statement (SELECT, INSERT, DELETE, UPDATE). For some, you may need several different statements or a sequence of statements, if the transaction is complex or takes in-parameters. For parameterized transactions, you should clearly document the parameters.

You should write your SQL statements based on the relational database you designed in the first project assignment. You should, however, modify your design to correct any problems we found while grading it. For this purpose, you can consult the E-R and SQL models we have provided in the solution to the first project assignment (available in the Project Assignments folder on Blackboard). In your next project assignment, which will be the last one before the project demos on 5/4/2017, you will be asked to write the JDBC and GUI code that will allow users of your system to interact with the database server in order to rent movies.

You must test your SQL statements by executing them against the test database, or Demo Data, that is provided. This means you must load your schema with the information described in the Demo Data. For parameterized transactions, choose "typical values" for the parameters from that Demo Data for your testing. You should provide the input, parameters, SQL definition, and the output of running it against the Demo Data, for each transaction in Section 3 of the Requirements Specification document.

You must hand in a document that includes:

- The name of your team (i.e. this should also be the name of your online movie rental system).
- The names and e-mail addresses of the team members.
- A dump (listing) of all your tables with the initial Demo Data loaded into them.
- For each transaction in Section 3 of the Requirements Specification, you should provide:
  - The definition of the transaction (can be taken directly from Section 3, extended and/or modified as you see fit).
  - The type and definition of any in-parameters to the SQL statement(s).
  - The SQL statements that implement the transaction (with parameters as ?'s, if necessary).
  - An execution of the SQL statements of the transaction against your database containing the Demo Data, using "typical" values for the parameters, showing the SQL statement used and the output.
  - A short description, if necessary, of any particular issues concerning this transaction.