Lab 04: SQL Queries

CO226: Database Systems

August 24, 2016

1 Introduction

Suppose that you have started a new movie-rating website and you have been collecting data on reviewer ratings of various movies. Figure01 shows a certain instance of the populated database. Log into MySQL server and create a database named E13XXXLab04. Create necessary tables in the database considering the following:

1. Decide suitable names and data types for each field
2. Define primary keys and foreign keys for each table
3. Choose referential integrity options that should be used on each of the following operations
   (a) ON UPDATE
   (b) ON DELETE

2 Tasks

Write the following SQL queries using MySQL, to retrieve the data from the database, you created in task01 above.

1. Find all the details about the movies presented in the populated **MOVIE** table.
2. Find all the details about the movies directed by *James Cameron*.
3. Find all the details about the movies directed by *James Cameron*, on or after year 2000.
4. Find all the **stars** presented in the rating table.
5. Find the distinct **stars** presented in the table.
6. Find movie ids and each movie's director.
7. Find movie ids, titles, years of the movies directed by *Steven Spielberg*.
8. Select reviewer ids with the corresponding movie ids reviewed by each reviewer.

9. Select distinct tuples from the results produced by the execution of the above query.

10. Select the details about the reviewers who have a last name called *Martinez*.

MOVIE

Movie ID	Title	Year	Director
101	Gone with the Wind	1939	Victor Fleming
102	Star Wars	1977	George Lucas
103	The Sound of Music	1965	Robert Wise
104	E.T.	1982	Steven Spielberg
105	Titanic	1997	James Cameron
106	Snow White	1937	NULL
107	Avatar	2009	James Cameron
108	Raiders of the Lost Ark	1981	Steven Spielberg

REVIEWER

Reviewer ID	Reviewer Name
201	Sarah Martinez
202	Daniel Lewis
203	Brittany Harris
204	Mike Anderson
205	Chris Jackson
206	Elizabeth Thomas
207	James Cameron
208	Ashley White

RATING

Reviewer ID	Movie ID	Stars	Rating Date
201	101	2	2011-01-22
201	101	4	2011-01-27
202	106	4	null
203	103	2	2011-01-20
203	108	4	2011-01-12
203	108	2	2011-01-30
204	101	3	2011-01-09
205	103	3	2011-01-27
205	104	2	2011-01-22
205	108	4	null
206	107	3	2011-01-15
206	106	5	2011-01-19
207	107	5	2011-01-20
208	104	3	2011-01-02

Figure 1: An instance of 'Movie Rating' database

3 Due Date

31st August 2016 before 11:55pm.

4 Submission

Submit all your sql queries in a single .sql file with the name E13XXXLab04.sql on or before the deadline.

Please note that you can discuss among your classmates, but the submitted assignments should be your own work. Please note that committing **plagiarism** or (assisting others to commit plagiarism) will result in zero marks.