

Database Systems

CMPT 308

- Lab 8: Normalization Two - 20 points

Goals	To continue developing your facility with the art and science of normalization.
Scenario	<p>You have been hired as a database consultant by EON productions to work in the casting department for the next James Bond film. They need a new Bond because he-who-must-not-be-named is clearly not working out. They want a database of actors, the movies in which they have appeared, and the director of those movies. They have collected the following data for your use:</p> <p>Actor Data name, address, birth date, hair color, eye color, height in inches, weight, spouse name, favorite color, screen actors guild anniversary date</p> <p>Movie Data name, year released, MPAA number, domestic box office sales, foreign box office sales, DVD/Blu-ray sales</p> <p>Director Data name, address, spouse name, film school attended, directors guild anniversary date, favorite lens maker</p>
Deliverables	<p>Build this database. You may add or rename any fields you like. You must create a relational database in Boyce-Codd normal form (BCNF). Document your database with . . .</p> <ol style="list-style-type: none">1. a fully decorated and aesthetically beautiful E/R diagram using LucidChart (www.LucidChart.com).2. SQL create statements for each table.3. Functional dependencies for each table. <p>Then...</p> <ol style="list-style-type: none">4. Write a query to show all the directors with whom actor "Roger Moore" has worked.
Hints	<p>This is not as easy as it sounds. There are more than three tables. Impress me by using entity subtypes to better represent the model.</p> <p>Remember:</p> <ul style="list-style-type: none">- Several actors can appear in the same movie under one or more directors.- Actors can also be directors, and therefore directors can also be actors.- Sometimes there is more than one director for a movie.
Resources	<ul style="list-style-type: none">• Chapter 3 in our text• Stack Overflow - http://stackoverflow.com/questions/tagged/normalization• Microsoft on Normalization - http://support.microsoft.com/kb/283878
Submitting	Submit your work as a PDF and a text <i>.sql</i> file. Push them to your GitHub repository before the due date (see syllabus). Remember to include your name and date. Neatness counts.

