Lab 10 – Database Programming

Deliverable

Word or PDF File containing your work

Set up

In this lab, you will apply the concepts learned in this week's lectures and readings. You'll need access to a SQL Server instance to perform these tasks. You can use either the iSchool resource or install SQL Server Developer or Express edition on your own computer.

It may also be helpful to review the W3 Schools chapters on selecting, inserting, deleting, and updating data:
http://www.w3schools.com/sql/sql_select.asp

http://www.w3schools.com/sql/sql_insert.asp

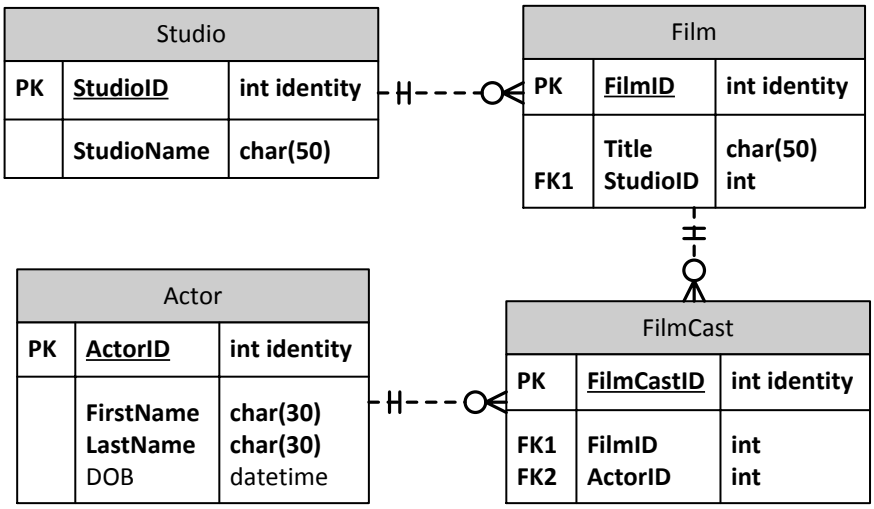
http://www.w3schools.com/sql/sql_delete.asp

http://www.w3schools.com/sql/sql_update.asp

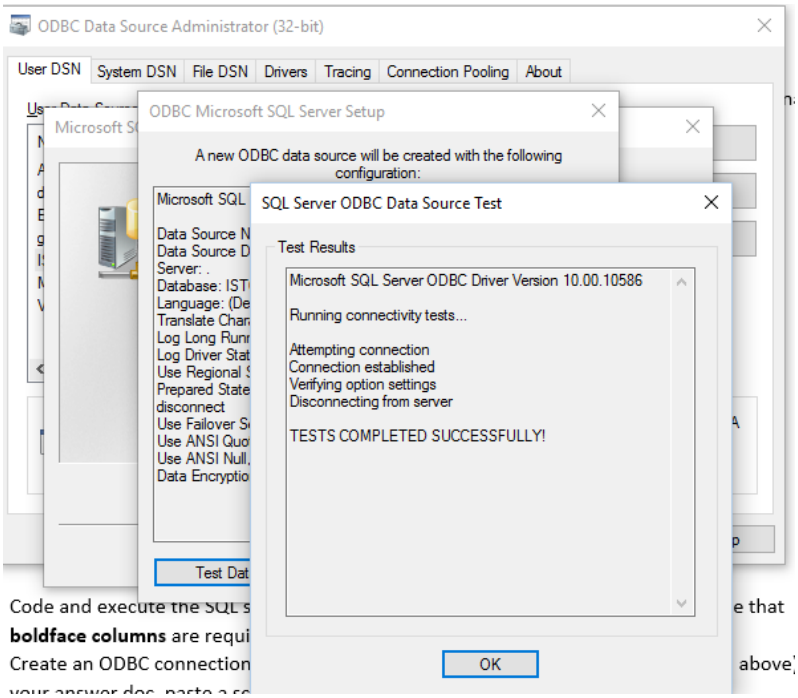
Steps

Create a blank document to record your answers to the questions called out below. Ensure your name is at the top of the document!

We're going to create a small movie database based on the following model:



1. Code and execute the SQL statements to create the tables in the model above. Note that **boldface columns** are required and cannot be NULL.
2. Create an ODBC connection to your IST659 database (containing the tables created above). In your answer doc, paste a screenshot of the successful connection test. Example:



3. Create a new blank Microsoft Access database and link to the tables you created in Step 1.
4. Under Database Tools, edit the relationships in Access to link the tables together based on the model at the beginning of the lab. This will aid in Form design later. Paste a screenshot of your completed Access relationships window to the Answers doc.
5. Create the following forms. Ensure the form controls for the foreign keys are drop downs that show the text of the related field. For instance, when selecting a Studio for the Film, store the StudioID in the database, but be sure the dropdown shows the Studio's Name to the user. Using the Form Wizard will help with all of these. Paste a screenshot of each form into your answers doc.

Form	**Table(s)**	**Notes**
Studios	Studio	Simple form with 2 controls to enter and manage Studio records
Actors	Actor	Simple form with controls to enter Actor data
Films	Film; FilmCast	Master-detail form for entering Films with a subform of FilmCast records for entering actors.

6. Using www.imdb.com, find some real life data to enter into your forms. Find at least 2 film studios (ie Dreamworks, Pixar, Disney, Universal, etc)to add and at least 5 films from each of those studios, and the top 5 billed actors for each.
7. Create an Access Report that brings all of these tables together, grouped by Studio, then Film, then Actor. Paste a screenshot of the first page of your report in your Answers doc.
8. In SQL Server management studio, execute the following code and paste a screenshot of the output to your answers document.

```
SELECT
      Film.Title
      , Actor.FirstName & ' ' & Actor.LastName as ActorName
FROM FilmCast
INNER JOIN Film ON Film.FilmID = FilmCast.FilmID
INNER JOIN Actor ON Actor.ActorID = FilmCast.ActorID
```