

Centennial College**COMP 228: Java Programming
LAB #5 - Developing Database Applications using JDBC.****Student:** _____

Due Date: Week 12.

Purpose: The purpose of this Lab assignment is to:

- Practice JDBC in Java Applications
- Develop a GUI Java application with data access capabilities

References: Read the textbook, ppt slides, and consult references (if any).
This material provides the necessary information you need to complete the exercises.

Instructions: Be sure to read the following general instructions carefully:

You **MUST** create a short demo video of your solution. The demo video should only show the features asked in the Rubric. Upload your video in your personal youtube account or google-drive account and share it with the instructor **only**. Do not share it publicly. During submission at the dropbox, **write the link of your video** in the **Comments box** of the dropbox. Next, submit your solution (at the dropbox).

You must name your Eclipse project according to the following rule:

YourFullName_COMP228Labnumber

Example: **JohnSmith_COMP228Lab5**

Each exercise should be placed in a separate package named *exercise1*, *exercise2*, etc.

Submit your assignment in a **zip file** that is named according to the following rule:

YourLastName_COMP228Labnumber.zip

Example: **JohnSmith_COMP228Lab5.zip**

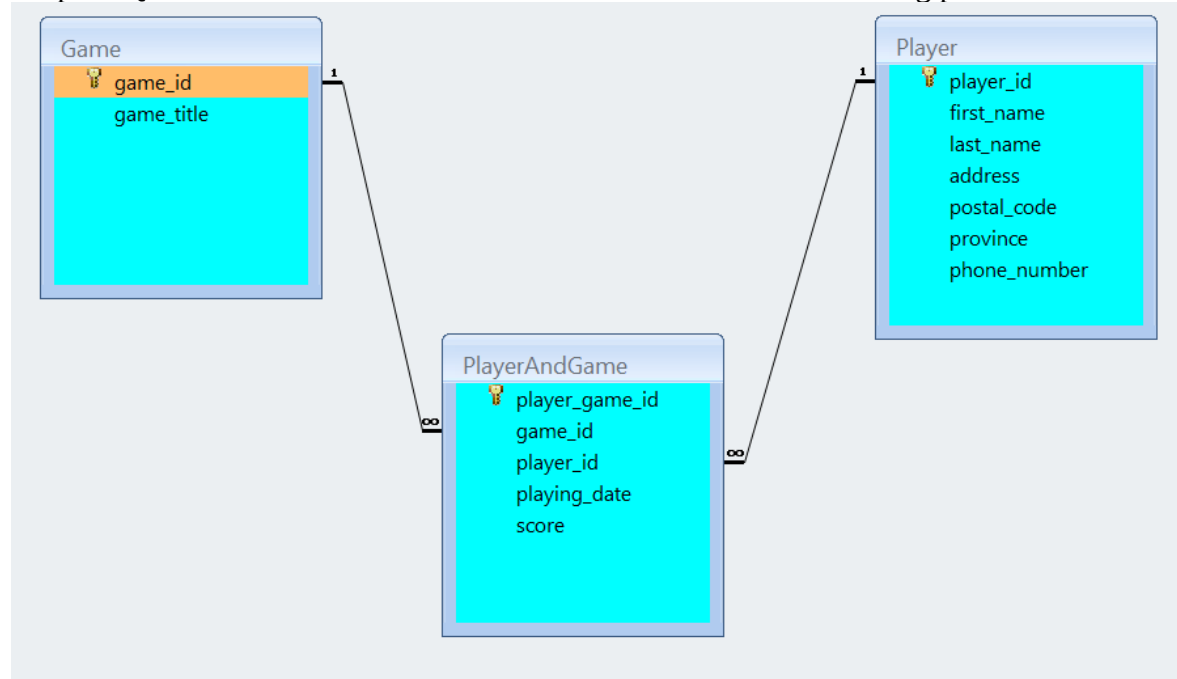
**For a pair submission include both full names. Example:
JohnSmith_JaneSmith_COMP228Lab5**

Apply the naming conventions for variables, methods, classes, and packages:

- *variable names* start with a *lowercase* character
- *classes* start with an *uppercase* character
- **packages** use only *lowercase* characters
- *methods* start with a *lowercase* character

Exercise 1:

Develop a GUI Java application that will allow the players to submit information about themselves and the games that they are playing on-line. The information will be stored in a simple SQLite database. The database tables are shown in the following picture:



You should populate the table *Game* with titles of games that you have "played" during this semester.

Your GUI should provide the necessary SWING or JavaFX components that will allow the user to enter and display the data. You will use JDBC to provide the following operations:

1. *Insert* game and player information into the database.
2. *Update* the existing player information.
3. *Display* reports with player and played games information. You may use a *JTable* or other components to display the reports. Allow the user to select *player_id*.

Use prepared statements to implement all database operations.

(10 marks)

Evaluation:

Functionality	
Correct implementation of UI and event handling.	35%
Correct implementation of JDBC	50%
Comments, correct naming of variables, methods, classes, etc.	5%
Friendly input/output	10%
Total	100%

