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CIS 310-02 - Database Design

FALL 2019

ASSIGNMENT #3

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Chapter 3, use figure Q3.21 on page 105 and complete question 21 and use the database shown in figure Q3.22 to answer questions 22 to 27.

#21. Identify and describe the components of the table shown in Figure Q3.21, using correct terminology. Use your knowledge of naming conventions to identify the tables probable foreign key(s).

- The table has one entity and it is the Employee
- Table also have five attributes which are located in top of tables each are named as follow: EMP_NUM, EMP_LNAME, EMP_INITIAL, EMP_FNAME, DEPT_CODE, JOB_CODE
- The table has 10 Rows
- There is only one Primary key and that is the EMP_NUM because it is very unique.
- The table has two foreign key DEPT_CODE and JOB_CODE.
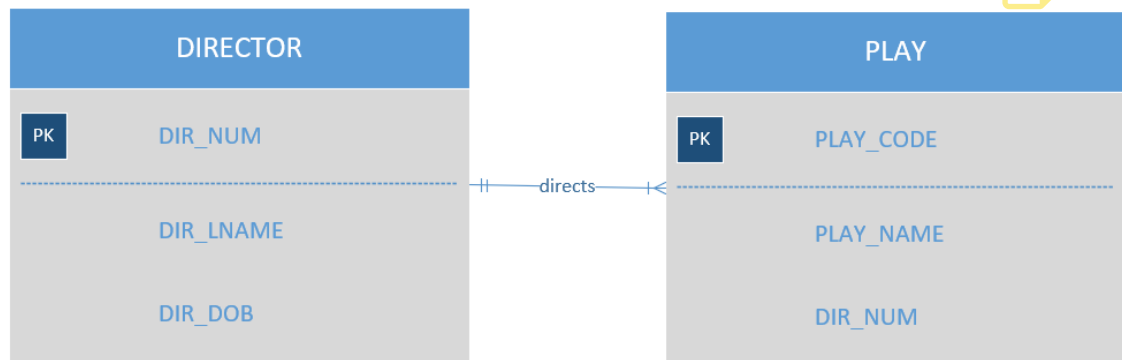
#22. Identify the Primary Key

- This question has two tables and each table I believe has two different Primary keys since the table named DIRECTOR has DR_NUM which is very unique in the table so that is the primary key for DIRECTOR TABLE. As for Table named PLAY the attribute named PLAY_CODE is the Primary key since its non-repetitive and uniquely identifies a row.

#23. Identify the foreign keys.

- Since a foreign key is references another table in this question DIRECTOR table has primary key which is the DIR_NUM and that is also included in the PLAY TABLE which is its foreign key since it references to DIRECTOR table.

#24 and #25. Create the ERM.

Entites are DIRECTOR AND PLAY, one and only DIRECTOR directs one to many PLAY

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#26. Since DIR_NUM is foreign key in the PLAY table, it would also be the index key since you can use the DIR_NUM in PLAY table to find the PLAY name and then revert to to DIRECTOR table to find DIR_LNAME in Director table. So DIRECTOR table would be used and grab the PLAY_NAME from PLAY table.

#27. Below is a conceptual view of the index table