CSCI 332 Database Concepts
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Fall 2020
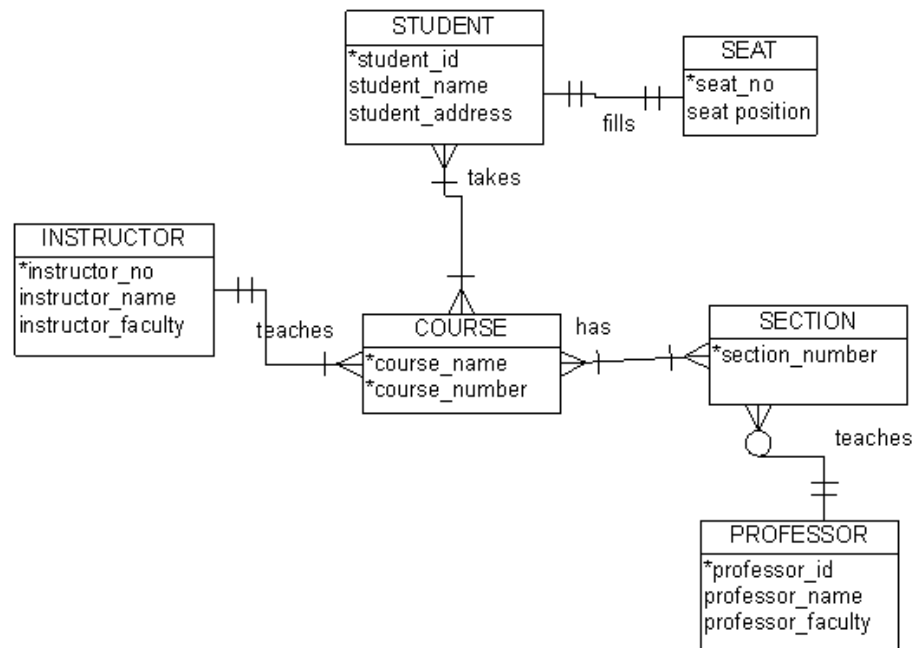Assignment 5 Data Modeling- **Due November 19, 2020**

Part I. Map the following ER model to a relational model to a relational model. Here the asterisk indicates a primary key attribute.

Save your answer in the file **Assign5I-***yourInitials***.pdf**. For example, mine would be **Assign5I-GJP.pdf**

Part II: The Just-in-Time Temporary Employee Registry (JITTER) recommends temporary employees to a company during peak periods for the company. JITTER's manager provides the following description of how the business maintains its records.

1. JITTER maintains a file of candidates who are willing to work. Each new candidate is given a unique ID number. The company also maintains the candidate's name, address, SSN, and an e-mail address.
2. JITTER maintains a list of companies who have, or are interested in, temporary employees. Each company has a unique ID number. JITTER also records the company name, a contact person within the company, and an e-mail address for the contact person.
3. If a candidate has found work through JITTER before that candidate will have a specific job history.
4. Each candidate has several qualifications. The qualifications use special codes and a description. Examples of such codes and descriptions are

ADA-L1	Administrative Assistant - Level 1
ADA-L2	Administrative Assistant - Level 2
PGR-PHP	Programmer - PHP proficient
PGR-C++	Programmer - C++ proficient
DBA-SQS	Database administrator - SQLServer
SYS-UNX	System Administration - Unix
NET-CIS	Network Administrator - Cisco experience

5. Each time a company requests a temporary worker JITTER makes an entry in an "Openings" folder. The folder contains an opening number that is unique per opening, the companyID, a qualification, a starting date, an anticipated ending date, and an hourly pay rate. The opening must indicate a qualification.
6. When a candidate matches a qualification sought that candidate is given the job and an entry is made in the Placement Record folder. The folder contains an opening number, candidate number, total hours worked, and so so. In addition an entry is made in the job history for the candidate.
7. JITTER uses special codes to indicate.

For part II of this assignment you must.

A. Provide an ER diagram representing the above requirements. You may hand-draw the ER diagram if you wish. If you hand draw the diagram, scan it (or use a camera-scan application for your phone) and save as a pdf file with the filename **Assign5A-***yourInitials***.pdf**

B. Map this diagram to a relational model using the compact form where we underline primary keys and circle, or place in bold italics, foreign keys. and save as a pdf file with the filename **Assign5B-***yourInitials***.pdf.** If you want to save parts A and B in the same pdf file, the name the file **Assign5AB-***yourInitials***.pdf**

C. Implement the relational model using MySQL Workbench, and make a back-up of your implementation. Name the backup **Assign5C-***yourInitials***.sql.** For example, mine would be **Assign5C-***GJP***.sql**

Submit all of your files to OAKS.