CIS4331 Spring 2019 Lab 14
Database Project Part 3: Implementing Relational Database Models

Important notes about your grades and this lab:

- This lab is the third part of a 3-part database project that let you design and implement a relational database.
- Each part of the project will be counted as Projects grades (NOT Lab grades) when your total grade is computed at the end of the semester.

1. Objective

This lab will help you to learn

- How to use an actual relational database software to implement a Relational Database Model (the relational schema) of a database system

2. Tasks to Complete

To implement a relational schema,

- For each database schema, create a table for each relation in the schema, defining the primary key, and foreign keys if any.
- When you create a table, choose an appropriate data type for each column.
- Make sure that you create parent table first, then their child tables. Your order of creating tables must show this.
- Then Insert the data into each table. When inserting it, also make sure that you insert parent rows first, then their child rows. Your order of insertions must show this.

a. Implement MC5 ExoProtect Employees' Computers Database depicted by the relational schema that you created in Database Project Part 2.
   i. Write CREATE TABLE statements to create the tables.
   ii. Use INSERT INTO statements to insert no fewer than 2 and no more than 10 records per table in this database.

   Note:

   You must use the information about real-world computers in the table. You can go to computer vendor websites, like dell.com, to find such information.

b. Implement MC6 Jones Sozers Sales and Rentals Database by the relational schema that you created in Database Project Part 2.
   i. Write CREATE TABLE statements to create the tables.
   ii. Use INSERT INTO statements to insert no fewer than 2 and no more than 10 records per table in this database.

   Note:

You must use the information about real-world construction equipment. You can go to the websites of construction equipment rental companies to find such information. One example is https://www.unitedrentals.com/marketplace/equipment#/

Requirements:

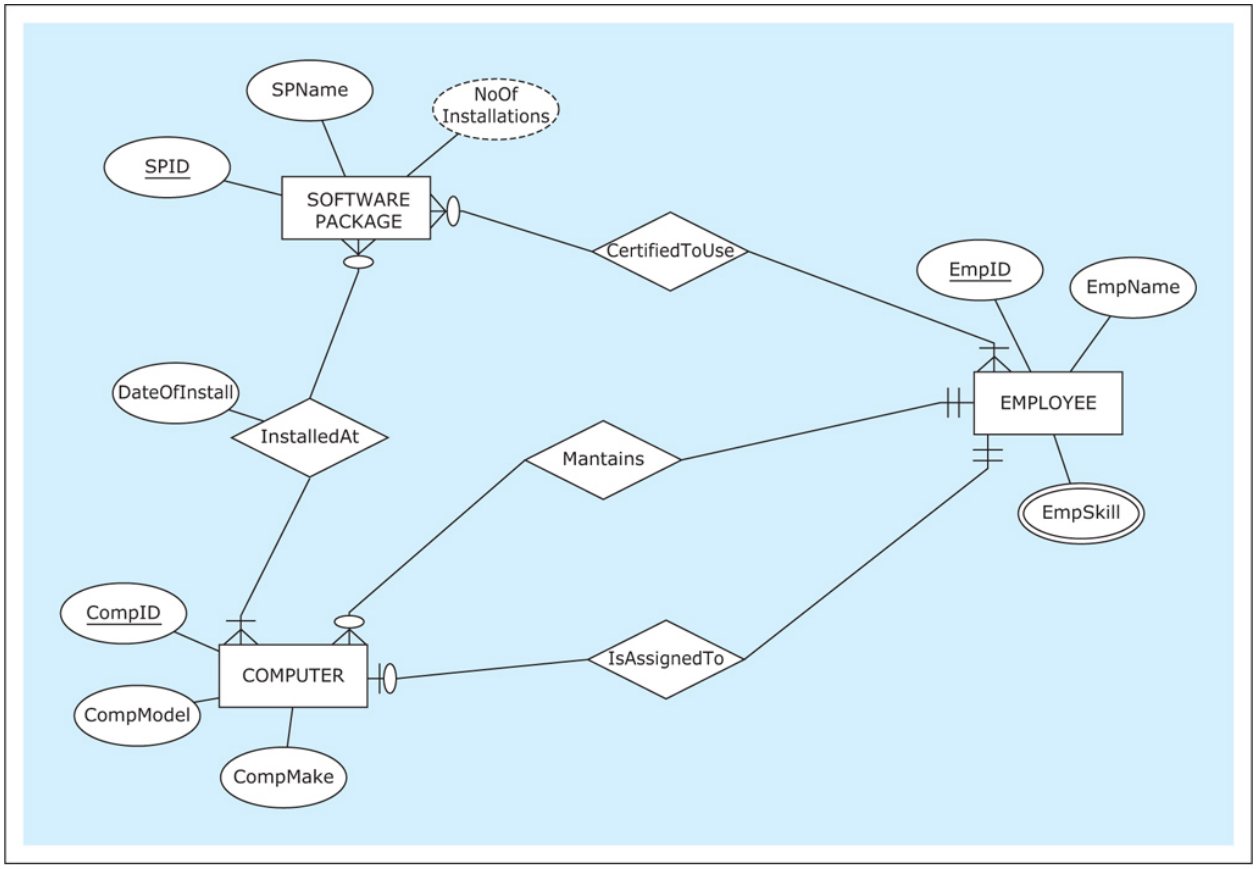
- **Your CREATE TABLE, INSERT statements must be listed in the order that is allowed by foreign key constraints. It's recommended that you run those statements in SQL Developer to make sure that the order is correct.**
- Handwritten commands are not acceptable. You must type everything in a computer file.
- Your **CREATE TABLE, INSERT statements must work in Oracle.**
- **Remember to define necessary constraints (at least the primary key, foreign key constraints).**

3. Submission Requirements

- This Project-Part3 is **due by 11:50PM, Tuesday, April 30, 2019**.
- Place your answers a word document file with extension .DOC or .DOCX, or a text file. Mark each answer set by MC5, MC6. Write your FULL name on the first page.
- Submit your word file by attaching it to the link ***Lab14-DBProjP3*** in folder Assignments on Canvas.

MC5 ExoProtect on Page 54

ExoProtect is an insurance company. The ER diagram for the ExoProtect Employees' Computers Database is shown below.



MC6 Jones Dozers in Chapter 2 End of Chapter Case Studies.

Jones Dozers is a construction equipment company. Write out all requirements for the ER-Diagram for the company's sales and rental database shown in the figure below.
Typo in the figure: switch the position of Mentor and Protégé.