CIS4331 Spring 2019 Assign2

1. Objectives

This lab will help you to learn

- How to write summary queries and subqueries
- How to work with views
- How to write basic PL/SQL code
- How to read an ERD diagram and understand the requirements it describes

2. Tasks to Complete

Complete the questions included in the later part of this document. The coding uses the tables in **user mgs**. This lab is **required to submit by 11:59PM, Wednesday, April 10.**

NOTE: the links to online Oracle SQL Language references are available in the Modules\Resources folder on Canvas.

NOTE: The scripts you need in this practice can be downloaded from the item "*Murach Book Example Code*" in the Modules\Resources folder on Canvas.

3. Submission Requirements

NOTES:

- **TO EARN ANY CREDIT, you MUST SUBMIT YOUR WORK TO CANVAS.**
- **YOU MUST WRITE your FULL NAME on the first page.**

You can place all your answers in one file. Or place all SQL and PL/SQL code in a .sql file and the answer for the ERD question in a .doc/.docx file. Mark each query based on the question number.

Then submit all files by attaching them to the link **Assign2** in folder **Assignments\Labs** on Canvas.

Exercises about Views on MGS Database

1. Create a view named product summary that includes for each product, the product code, product name, the number of orders containing this product, and the total price after discount of this product in these orders.
2. Create a view named hot_product based on the view in Q1. This view includes the product code and product name of products that were sold in at least 2 orders.
3. Write a query that prints the product code, product name of products that were sold in at least 2 orders. Write this query in 2 versions. One based on the view hot_product. The other version does not use the view hot_product or product_summary.
4. In Lab 10, you created a view named customer_addresses. Write 2 SQL statements to update the information about customer with id 1. Change the email address to new@gmail.com. Change the street address to Suite 3, 1925 N. 12th Street. Which change is successful? Which is a failure? What is the error?

Exercises about PL/SQL on MGS Database

5. Write a script that uses an anonymous block of PL/SQL code that creates a cursor for a result set that consists of the product_name and list_price columns for each product with a list price that's greater than $700. The rows in this result set should be sorted in descending sequence by list price. Then, the procedure should display a string variable that includes the product_name and list price for each product so it looks something like this:

   ```
   "Gibson SG","2517.00"|"Gibson Les Paul","1199.00"|
   ```

   Here, each value is enclosed in double quotes ("), each column is separated by a comma (,) and each row is separated by a pipe character (|).
6. Write a script that uses an anonymous block of PL/SQL code that attempts to insert a new category named "Guitars" into the Categories table. If the insert is successful, the procedure should display this message:

   ```
   1 row was inserted.
   ```

   If the update is unsuccessful, the procedure should display this message:

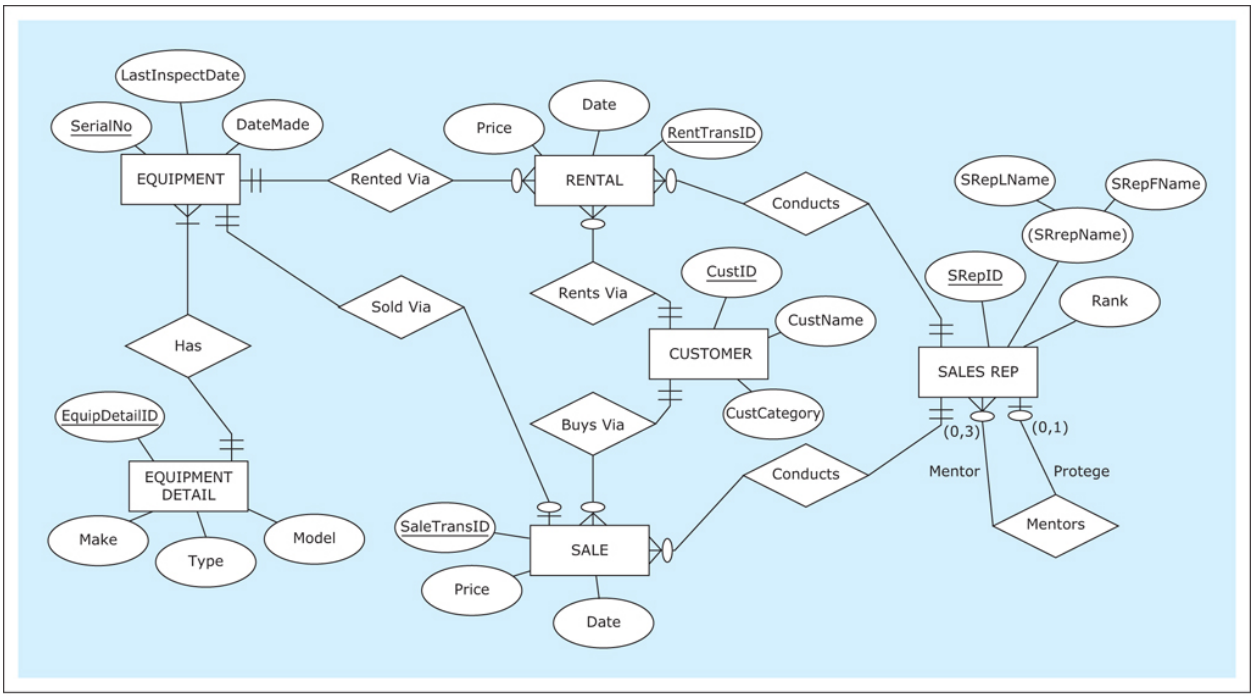
   ```
   Row was not inserted - duplicate entry.
   ```

Exercise about ERD

1. MC6 Jones Dozers in Chapter 2 End of Chapter Case Studies on Page 54. It's restated here.

   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.


LastInspectDate
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Rents Via
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EquipDetailID
EQUIPMENT DETAIL
Buys Via
CustCategory
(0,3)
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Mentor
Protege
Conducts
Mentors
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Type
Model
SaleTransID
SALE
Price
Date