

MEMO

DATE: February 23, 2021
TO: Cambria Art Gallery Development Teams
FROM: Leonard

SUBJECT: Development Guidelines

DUE: February 2, 2021

SQL Chapters needed to complete this task:

SQL 1: Retrieving Data Using the SQL Select Statement (SELECT)
SQL 2: Restricting and Sorting Data (ORDER BY)
SQL 3: Using Single-Row Functions to Customize Output (CONCATENATE ... or use ||.)
SQL 4: Using Conversion Functions and Conditional Expressions (NVL function, TO_CHAR)
SQL 6: Displaying Data from Multiple Tables (JOIN, OUTER JOIN)
SQL 9: Manipulating Data (INSERT)
SQL 10: Using DDL Statements to Create and Manage Tables (CREATE TABLE)
SQL 11: Creating Other Schema Objects (CREATE VIEW)

- STATE ANY ASSUMPTIONS YOU HAVE MADE
- CHECK YOUR WORK TO ASSURE IT IS CORRECT
- IF YOU ARE UNABLE TO ACCOMPLISH ANY PART OF THIS TASK, THIS MUST BE STATED AT THE BEGINNING OF YOUR SUBMISSION. NO PARTIAL CREDIT WILL BE GIVEN FOR THIS TASK IF IT CAN BE EASILY DETERMINED THAT YOU HAVE SUBMITTED WORK THAT IS INCORRECT.
- CHECK YOUR SCRIPT TO ASSURE YOUR CODE MATCHES YOUR ERA DIAGRAM.

TASK 3: Services / Warranty tables

Recently I sent a memo, dated February 11, 2021 with some revisions to the project. In this memo, I am asking that some of these revisions be implemented and also specifying some queries I would like to be written.

1. Creating Tables:
 - a. For the Services table, the attributes of a Service include the following: Service ID, Service Description, Service Selling Price and Service Cost. Choose reasonable datatypes and assure reasonable values for price and cost are entered into the table (e.g., Price and Cost should not be negative). Price, Cost and Description are required attributes. Service ID is the Primary Key.
 - b. For the Warranty table, the attributes are Warranty ID, Term and Price. Warranty ID is the primary key. Term and price are required. Choose reasonable datatypes and assure reasonable values for price.
2. Data:

For your purposes, only include this short subset of the services offered by Cambria Art Gallery but please add 4 more services you think appropriate. There are only three records needed for the Warranty table as shown below.

SERVICES

ServiceID	ServiceDescription	ServiceSellingPrice	ServiceCost
1001	Cleaning Small	75	25
1002	Cleaning Large	150	55
1003	Framing Small	200	75
1004	Framing Large	400	140
1005	Picture Mounting Small	50	20
1006	Picture Mounting Large	100	30

WARRANTY

WarrantyID	WarrantyTerm	WarrantyBasePrice
1000	3	150
1001	5	225
1002	7	300

3. Quality Control Check List:
 - a. See comments in 1a and 1b ... including suggested/ required Primary Key, CHECK, NOT NULL, UNIQUE and Referential Integrity constraints.
4. Queries: Write the following SELECT statements that returns the following to test your work. Write these as CREATE VIEW statements.
 - a. Service List: Service ID, Description, Cost, Price and profit margin (i.e., price – cost) ordered by Service ID. Please display cost, price, and profit margin using \$ signs and cents (e.g., \$150.00). Use column alias Profit Margin.
 - b. Service List profit margin: Service ID, Description, Cost, Price and profit margin (i.e., price – cost) ordered by decreasing profit margin. Please display cost, price, and profit margin using \$ signs and cents (e.g., \$150.00). Use column alias Profit Margin.
 - c. Warranty List: Warranty ID, term, price. Please display price using \$ signs and cents (e.g., \$150.00). Show this in increasing Warranty ID order.

Submission:

SQL SCRIPT consisting of the following:

Comments at beginning of script with the names of your team members.

DROP TABLE STATEMENTS (put all DROP TABLE statements at beginning of script)

For each table ...

CREATE TABLE

INSERT STATEMENTS (put insert statements after each table)

CREATE VIEW (put all CREATE VIEW statements at end of script)

NOTE: THIS SCRIPT FILE IS NOT TO BE SUBMITTED IN WORD BUT IN A FILE THAT CAN BE OPENED AND EASILY READ IN NOTEPAD. THE SCRIPT FILE SHOULD BE EXECUTABLE IF I UPLOAD IT TO ORACLE APEX.

An accompanying PDF document that presents any assumptions, things that don't work, etc.