University of Central Florida

CGS 2545 Database Concepts

Assignment 7
Cruise Database Project
Due, Friday, March 10, 2023 for maximum 100%
Saturday, March 11, 2023 for maximum 90%
Sunday, March 12, 2023 for maximum 80%
Monday, March 13, 2023 for maximum 70%

Deliverables

To complete this assignment, submit the following **three** files to Webcourses:

1. An SQL file (i.e. save the file with file extension **.sql**) containing the SQL written to perform the tasks. Example: Assignment2Code.sql
2. An exported SQL file using MySQL Workbench Data Export option. The file name should be the following format: **FirstnameLastnameAssignment#.sql**. Example: KarinMarkleAssignment2.sql
3. An ER Diagram generated by MySQL Workbench. The file name should be the following format: **FirstnameLastnameAssignment#ERDiagram.mwb**. Example: KarinMarkleAssignment2ERDiagram.mwb

Assignment Scope

1. Use database **cruise**.
2. Create tables.
3. Insert data into tables.
4. Write a join query.
5. Generate an ER diagram.

References

1. 10_SQL Select Database.pptx
2. 11_SQL Create Table.pptx
3. 13_SQL Insert Query.pptx
4. 14_SQL Select Query.pptx
5. 15_SQL Where Clause.pptx
6. 17_SQL Update Query.pptx
7. 25_AdvancedSQL Constraints.pptx
8. 26_AdvancedSQL Using Joins.pptx

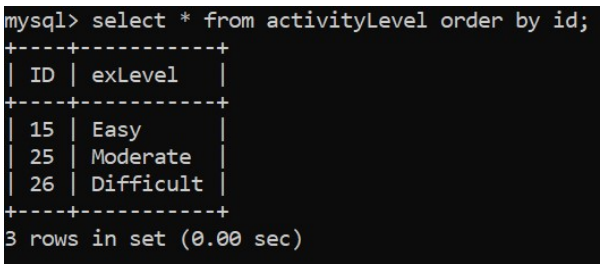
To access the DBMS

1. Launch the MySQL Command Line Client executable or MySQL Workbench
2. Login in using the password set during installation “cgs2545” or your chosen password.

Tasks

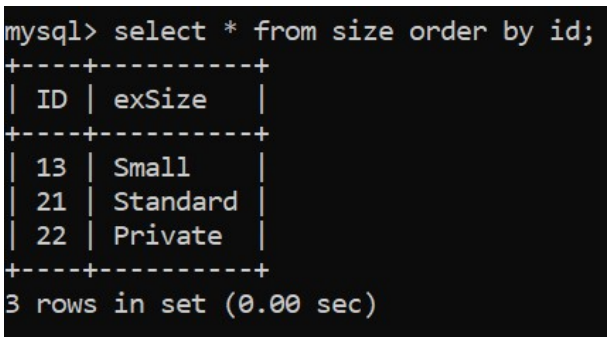
Query Description
1. Change to use the database **cruise**
Update table *type*
2. Update table **type,** set the value of column **exType** equal to '**Cultural'** where **exType** equals '**Cultural, Scenic**'
Create new table
3. Create table named **passengerExcursion** with the following attributes, data types, and constraints: a. **passengerId**, integer, not null b. **excursionId**, integer, not null c. primary key is fields **passengerId** and **excursionId** d. foreign key on field **passengerId**, references table **passenger**, column **id** e. foreign key on field **excursionId**, references table **excursion**, column **id**
Populate tables
4. Insert into table **activityLevel** data in file **activityLevel.sql**
5. Insert into table **size** data in file **size.sql**
6. Insert into table **type** data in file **type.sql**
7. Insert into table **foodBeverage** data in file **foodBeverage.sql**
8. Insert into table **excursion** data in file **excursion.sql**
9. Insert into table **passengerExcursion** data in file **passengerExcursion.sql**
Join query
14. Write a join query to join tables **passenger**, **excursion, passengerExcursion, size, type, foodBeverage, activityLevel** to select the following: a. Columns **firstName** and **lastName** from table **passenger** b. Columns **name** from table **excursion** c. Column **exSize** from table **size** d. Column **exType** from table **type** e. Column **offering** from table **foodBeverage** f. Column **exLevel** from table **activityLevel** g. Columns **durationMinutes** and **price** from table **excursion** h. Order by columns **excursion.name** and **passenger.lastName**
File requirements
15. Generate an ER Diagram using MySQL Workbench, save as a .mwb file
16. Export database Cruise using MySQL Workbench, save as a .sql file
17. Provide written source code in a .sql file

Test Cases	
Test Case 1	**select * from activityLevel** should look similar to Figure 1
Test Case 2	**select * from size** should look similar to Figure 2
Test Case 3	**select * from type** should look similar to Figure 3
Test Case 4	**select * from foodBeverage** should look similar to Figure 4
Test Case 5	**select id, name, sizeId, typeId, foodBeverageId, activityLevelId from excursion** should look similar to Figure 5
Test Case 6	**select * from passengerExcursion** should look similar to Figure 6
Test Case 7	**Join query result set** should look like Figure 7
Test Case 8	**ER Diagram** should look like Figure 8



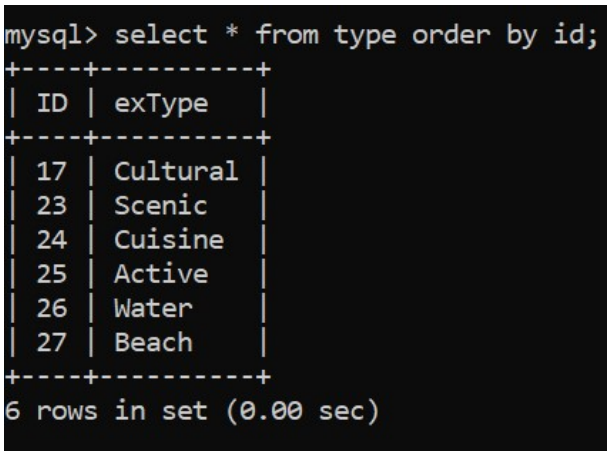
```
mysql> select * from activityLevel order by id;
+----+-----------+
| ID | exLevel   |
+----+-----------+
| 15 | Easy      |
| 25 | Moderate  |
| 26 | Difficult |
+----+-----------+
3 rows in set (0.00 sec)
```

Figure 1 Table activityLevel



```
mysql> select * from size order by id;
+----+----------+
| ID | exSize   |
+----+----------+
| 13 | Small    |
| 21 | Standard |
| 22 | Private  |
+----+----------+
3 rows in set (0.00 sec)
```

Figure 2 Table size



```
mysql> select * from type order by id;
+----+----------+
| ID | exType   |
+----+----------+
| 17 | Cultural |
| 23 | Scenic   |
| 24 | Cuisine  |
| 25 | Active   |
| 26 | Water    |
| 27 | Beach    |
+----+----------+
6 rows in set (0.00 sec)
```

Figure 3 Table type

```
mysql> select * from foodbeverage order by id;
+----+--------------------+
| ID | offering           |
+----+--------------------+
| 27 | Not Included       |
| 28 | None               |
| 29 | Snack              |
| 30 | Coffee Included    |
| 31 | Salmon Bake        |
| 32 | Buffet Included    |
| 33 | Lunch is Included  |
| 34 | Beverages Included |
+----+--------------------+
8 rows in set (0.00 sec)
```

Figure 4 Table foodBeverage

```
mysql> select id, name, sizeId, typeId, foodBeverageId, activityLevelId from excursion ;
+-----+-----------------------------------------------+--------+--------+---------------+-----------------+
| id  | name                                          | sizeId | typeId | foodBeverageId | activityLevelId |
+-----+-----------------------------------------------+--------+--------+---------------+-----------------+
|  71 | Scenic Waterfall Adventure                    |     21 |     17 |            27 |              15 |
|  73 | White Pass Summit Rail and Bus Excursion      |     13 |     23 |            27 |              15 |
| 135 | Skagway City and White Pass Summit            |     21 |     23 |            27 |              25 |
| 139 | White Pass Summit Rail and Yukon Suspension Bridge |     13 |     23 |            27 |              15 |
| 189 | Helicopter Glacier Discovery                  |     21 |     17 |            27 |              15 |
| 190 | Exclusive Juneau City and Mendenhall Glacier Tour |     21 |     23 |            28 |              15 |
| 191 | Whales and Mendenhall Glacier                 |     21 |     23 |            29 |              25 |
| 192 | Best of Juneau                                |     21 |     24 |            31 |              15 |
| 193 | Mendenhall Lake Kayak and Salmon Bake         |     13 |     25 |            33 |              25 |
| 194 | Mendenhall Glacier Trek                       |     13 |     25 |            29 |              26 |
| 195 | Helicopter Dog Sledding Extended Tour         |     13 |     25 |            27 |              15 |
+-----+-----------------------------------------------+--------+--------+---------------+-----------------+
11 rows in set (0.00 sec)
```

Figure 5 select from excursion result set

```
mysql> select * from passengerexcursion;
+-------------+-------------+
| passengerId | excursionId |
+-------------+-------------+
|          61 |          71 |
|         125 |          71 |
|          67 |          73 |
|         135 |          73 |
|          71 |         135 |
|         129 |         135 |
|         255 |         135 |
|          75 |         139 |
|          89 |         139 |
|         151 |         189 |
|         271 |         189 |
|          79 |         190 |
|         143 |         190 |
|          87 |         191 |
|         139 |         191 |
|         175 |         192 |
|         283 |         192 |
|         165 |         195 |
|         279 |         195 |
+-------------+-------------+
19 rows in set (0.00 sec)
```

Figure 6 Table passengerExcursion

firstName	lastName	name	exSize	exType	offering	exLevel	durationMinutes	price
Atticus	Atkinson	Best of Juneau	Standard	Cuisine	Salmon Bake	Easy	375	223.00
Jordana	Beck	Best of Juneau	Standard	Cuisine	Salmon Bake	Easy	375	223.00
Kavita	Heath	Exclusive Juneau City and Mendenhall Glacier Tour	Standard	Scenic	None	Easy	180	75.00
Robin	Solis	Exclusive Juneau City and Mendenhall Glacier Tour	Standard	Scenic	None	Easy	180	75.00
Bradlee	Esparza	Helicopter Dog Sledding Extended Tour	Small	Active	Not Included	Easy	220	832.00
Efe	House	Helicopter Dog Sledding Extended Tour	Small	Active	Not Included	Easy	220	832.00
Leilani	Leonard	Helicopter Glacier Discovery	Standard	Cultural	Not Included	Easy	180	435.00
Angus	Neville	Helicopter Glacier Discovery	Standard	Cultural	Not Included	Easy	180	435.00
Yvonne	Goodman	Scenic Waterfall Adventure	Standard	Cultural	Not Included	Easy	180	75.00
Dante	Mackenzie	Scenic Waterfall Adventure	Standard	Cultural	Not Included	Easy	180	75.00
Haniya	Kelly	Skagway City and White Pass Summit	Standard	Scenic	Not Included	Moderate	150	65.00
Javan	Rennie	Skagway City and White Pass Summit	Standard	Scenic	Not Included	Moderate	150	65.00
Daniel	Rollins	Skagway City and White Pass Summit	Standard	Scenic	Not Included	Moderate	150	65.00
Dane	Kaiser	Whales and Mendenhall Glacier	Standard	Scenic	Snack	Moderate	280	225.00
Uzair	Sparrow	Whales and Mendenhall Glacier	Standard	Scenic	Snack	Moderate	280	225.00
Beverley	Mckee	White Pass Summit Rail and Bus Excursion	Small	Scenic	Not Included	Easy	225	186.00
Nico	Prince	White Pass Summit Rail and Bus Excursion	Small	Scenic	Not Included	Easy	225	186.00
Hammad	Newman	White Pass Summit Rail and Yukon Suspension Bridge	Small	Scenic	Not Included	Easy	285	229.00
Imaani	Wallace	White Pass Summit Rail and Yukon Suspension Bridge	Small	Scenic	Not Included	Easy	285	229.00

19 rows in set (0.00 sec)

Figure 7 Join query result set

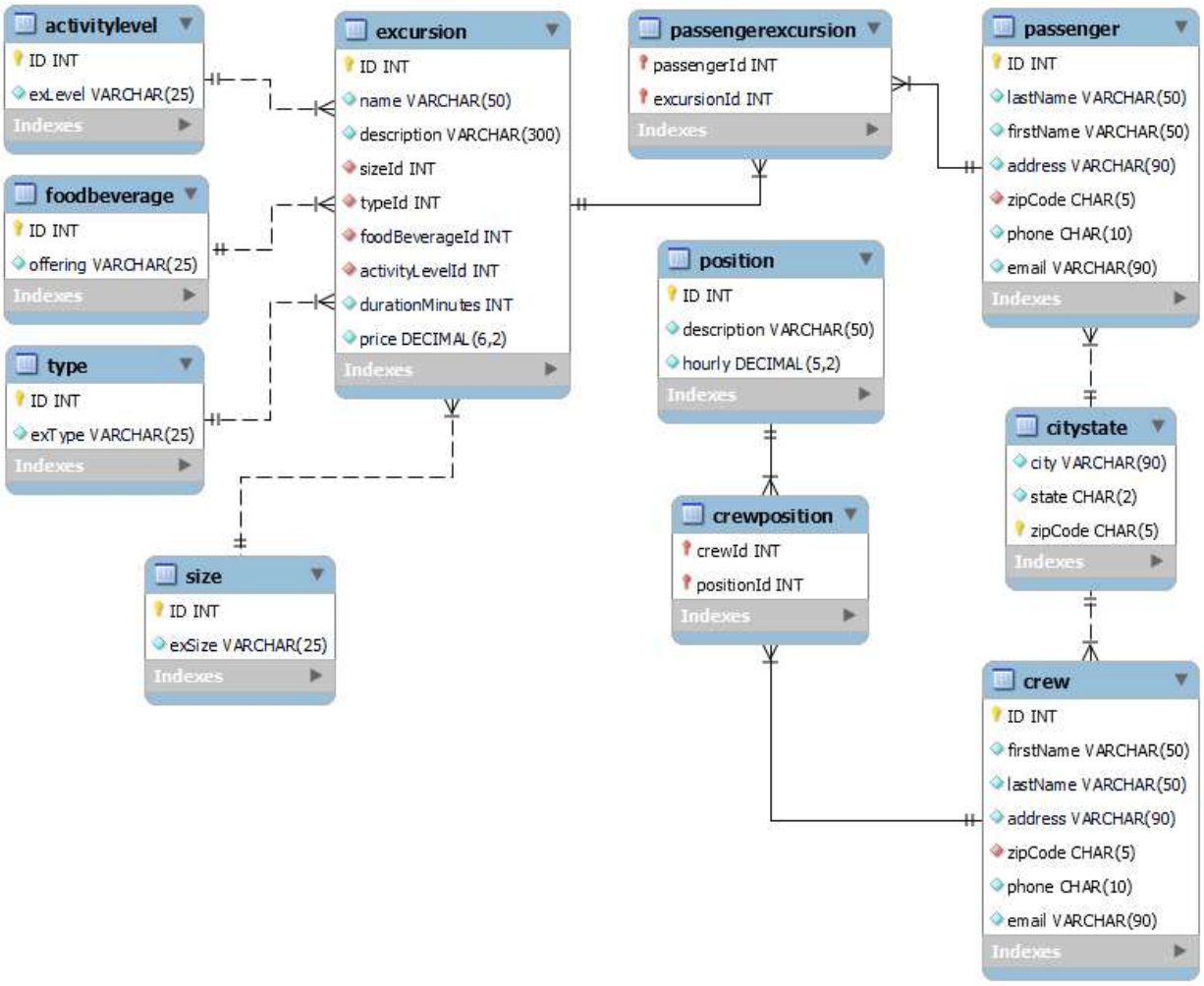


Figure 8 ER Diagram