

# University of Central Florida

## CGS 2545 Database Concepts

### Assignment 8

#### Airline Database Project

**Due, Friday, November 3, 2023 for maximum 100%**

**Saturday, November 4, 2023 for maximum 90%**

**Sunday, November 5, 2023 for maximum 80%**

**Monday, November 6, 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 **airline**.
2. Write join queries.
3. Create views.
4. Create union.
5. Generate an ER diagram.

#### References

1. 10\_SQL Select Database.pptx
2. 13\_SQL Insert Query.pptx
3. 26\_AdvancedSQL Using Joins.pptx
4. 27\_AdvancedSQL Unions Clause.pptx
5. 33\_AdvancedSQL Using Views.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 <b>airline</b>
2. Create view <b>airlineManifestView</b> with a <b>union</b> to combine the following two join queries <ol style="list-style-type: none"> <li>Join tables <b>employee</b>, <b>flight</b>, <b>employeeFlight</b>, <b>position</b>, and <b>employeePosition</b> to do the following               <ol style="list-style-type: none"> <li>Concatenate columns <b>firstName</b> and <b>lastName</b> from table <b>employee</b> as <b>Name</b></li> <li>Column <b>phone</b> from table <b>employee</b> as <b>Phone Number</b></li> <li>Column <b>description</b> from table <b>position</b> as <b>Role</b></li> <li>Column <b>origin</b> from table <b>flight</b> as <b>Origin</b></li> <li>Column <b>departure</b> from table <b>flight</b> as <b>Departure</b></li> <li>Column <b>destination</b> from table <b>flight</b> as <b>Destination</b></li> <li>Column <b>arrival</b> from table <b>flight</b> as <b>Arrival</b></li> </ol> </li> <li><b>UNION</b></li> <li>Join tables <b>passenger</b>, <b>flight</b>, and <b>passengerFlight</b> to do the following               <ol style="list-style-type: none"> <li>Concatenate columns <b>firstName</b> and <b>lastName</b> from table <b>passenger</b> as <b>Name</b></li> <li>Column <b>phone</b> from table <b>passenger</b> as <b>Phone Number</b></li> <li>Explicit text "<b>Passenger</b>" as <b>Role</b></li> <li>Column <b>origin</b> from table <b>flight</b> as <b>Origin</b></li> <li>Column <b>departure</b> from table <b>flight</b> as <b>Departure</b></li> <li>Column <b>destination</b> from table <b>flight</b> as <b>Destination</b></li> <li>Column <b>arrival</b> from table <b>flight</b> as <b>Arrival</b></li> </ol> </li> </ol>
9. Generate an ER Diagram using MySQL Workbench, save as a .mwb file
10. Export database <b>airline</b> using MySQL Workbench, save as a .sql file
11. Provide written source code in a .sql file

Test Cases	
Test Case 1	select * from airlineManifestView should look like Figure 1
Test Case 2	ER Diagram should look like Figure 2

```
mysql> select * from airlinemanifestview;
```

Name	Phone Number	Role	Origin	Departure	Destination	Arrival
Umaiza Melia	2025550135	Co-pilot	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Nico Prince	2025550137	Flight Attendant	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Brodie Gordon	9016899813	Pilot	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Rebekah Morgan	6073928343	Flight Attendant	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Ty Bell	2393336881	Flight Attendant	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Mathew Horton	7195789907	Pilot	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Leo Bird	7747829407	Co-pilot	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Malik Vincent	9149573014	Flight Attendant	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Lyra Murphy	3527673126	Flight Attendant	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Laila Christensen	9017396978	Flight Attendant	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Paris Lindsey	2025550132	Pilot	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Nico Prince	2025550137	Flight Attendant	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Fern Garner	2256254378	Co-pilot	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Malik Vincent	9149573014	Flight Attendant	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Ty Bell	2393336881	Flight Attendant	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Brodie Gordon	9016899813	Pilot	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Leo Bird	7747829407	Co-pilot	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Rebekah Morgan	6073928343	Flight Attendant	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Lyra Murphy	3527673126	Flight Attendant	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Laila Christensen	9017396978	Flight Attendant	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Dante Rennie	2225550112	Passenger	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Thomas Waters	2225550115	Passenger	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Alysha Rollins	2025550115	Passenger	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Robin Solis	2025550164	Passenger	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Jordana Beck	2025550200	Passenger	DAB	2023-11-01 07:00:00	FLL	2023-11-01 08:00:00
Avaya Clarke	2225550119	Passenger	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Imaani Wallace	2025550195	Passenger	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Haniya Kaiser	2225550121	Passenger	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Grover Squires	2025550180	Passenger	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Michelle Ramirez	2025550198	Passenger	EYW	2023-11-04 13:00:00	MLB	2023-11-04 14:00:00
Victor Newman	2225550122	Passenger	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Umaiza Heath	2025550135	Passenger	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Kavita Heath	2025550165	Passenger	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Yvonne Goodman	2025550109	Passenger	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Efe House	2025550196	Passenger	SFB	2023-11-07 09:00:00	SRQ	2023-11-07 10:00:00
Brian Roberts	2225550125	Passenger	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Avaya Gonzalez	2025550119	Passenger	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Beverley Mckee	2025550125	Passenger	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Igor Prince	2025550199	Passenger	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00
Amari Currie	2025550194	Passenger	TLH	2023-11-09 07:00:00	TPA	2023-11-09 08:00:00

40 rows in set (0.00 sec)

Figure 1 View airlineManifestView

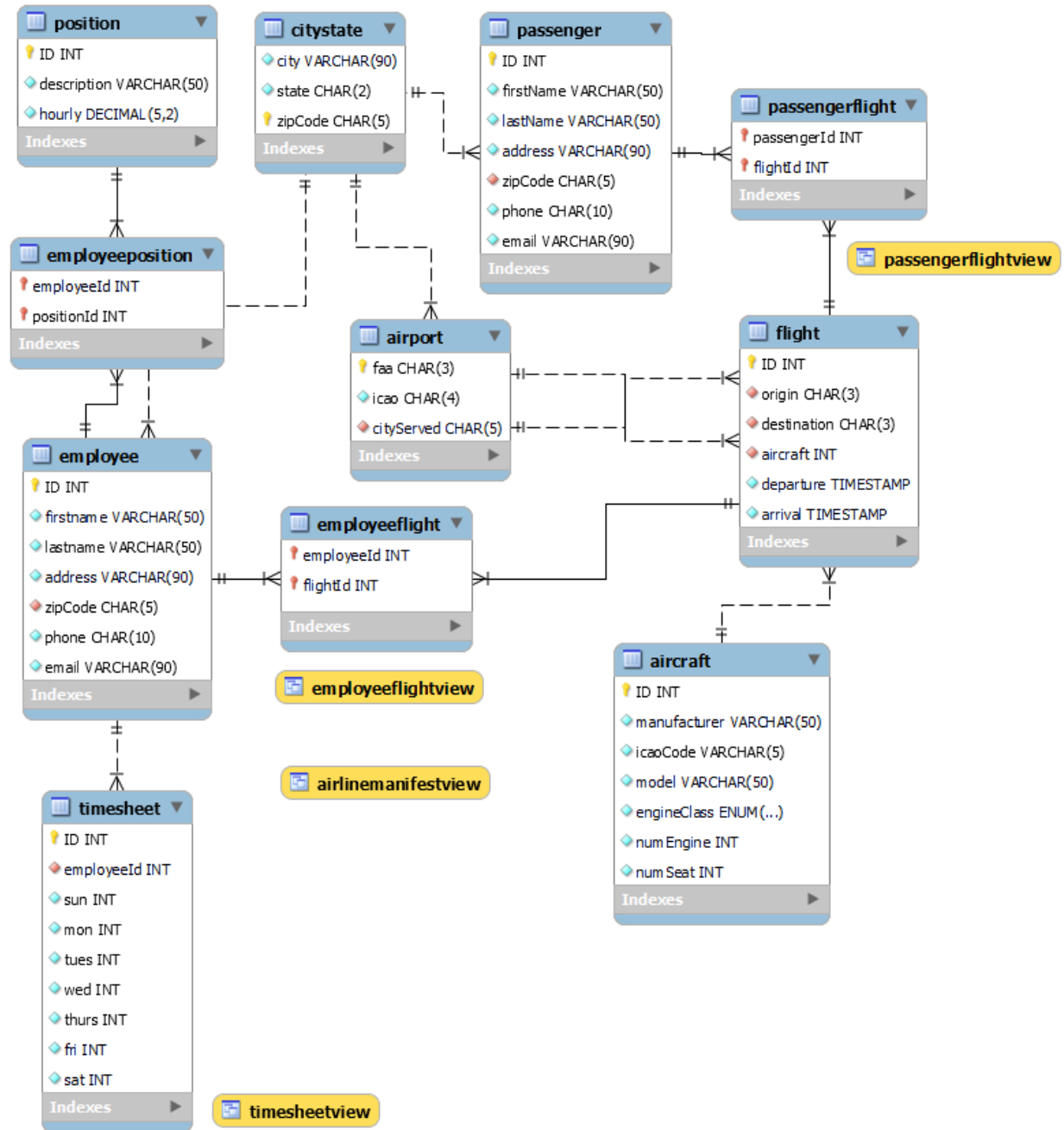


Figure 2 ER Diagram