

University of Central Florida

CGS 2545 Database Concepts

Assignment 4

Airline Database Project

Due, Friday, October 6, 2023 for maximum 100%

Saturday, October 7, 2023 for maximum 90%

Sunday, October 8, 2023 for maximum 80%

Monday, October 9, 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. Insert data into tables.
3. Write a join query.
4. Generate an ER diagram.

References

1. 10_SQL Select Database.pptx
2. 13_SQL Insert Query.pptx
3. 14_SQL Select Query.pptx
4. 15_SQL Where Clause.pptx
5. 21_SQL Order By.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 airline
2. Insert into table cityState data from file cityState.sql
3. Insert into table employee data from file employee.sql
4. Insert into table employeePosition data from file employeePosition.sql
5. Write a join query to query join table employee , position and employeePosition to select the following: <ol style="list-style-type: none"> Columns firstName, lastName, phone, email from table employee Column description from table position Order by columns description and lastName
6. Generate an ER Diagram using MySQL Workbench, save as a .mwb file
7. Export database cruise using MySQL Workbench, save as a .sql file
8. Provide written source code in a .sql file

Test Cases	
Test Case 1	select * from employee should look like Figure 1 Note: different ID values are okay
Test Case 2	select * from cityState should look like Figure 2
Test Case 3	select * from employeePosition should look similar to Figure 3
Test Case 4	Join query result set should look like Figure 4
Test Case 5	ER Diagram should look like Figure 5

```
mysql> select * from employee;
```

ID	firstname	lastname	address	zipCode	phone	email
1	Paris	Lindsey	763 West Mulberry St	29710	2025550132	plindsey@isp.com
2	Umaiza	Melia	545 Ohio Ave	29710	2025550135	umelia@isp.com
3	Nico	Prince	20 Middle River Street	44094	2025550137	nprince@isp.com
4	Javan	Rennie	8112 North Country St	44094	2025550139	jrennie@isp.com
5	Ali	Waters	83 Rockland Lane	44094	2025550144	awaters@isp.com
6	JohnPaul	Clarke	1 Riverside Lane	44094	2025550153	jpcClarke@isp.com
7	Dane	Kaiser	694 Wall Road	44094	2025550155	kdaiser@isp.com
8	Hammad	Newman	9970 State Court	30096	2025550157	hnewman@isp.com
9	Maha	Guthrie	54 Woodsman Drive	30096	2025550161	mguthrie@isp.com
10	Tulisa	Roberts	7174 Studebaker Street	30096	2025550163	troberts@isp.com
11	Raheem	Montgomery	71 Paris Hill Rd.	39180	4134849795	rmontgomery@cruise.com
13	Oliwier	Barnett	81 Cedar Swamp St.	39180	2764343958	obarnett@cruise.com
15	Dawson	Marquez	90 Mammoth Street	45601	7634882879	dmarquez@cruise.com
16	Raja	Glass	7918 Talbot Ave.	45601	2319969540	rglass@cruise.com
18	Nicholas	Pena	8123 Race Ave.	95060	7815242242	npena@cruise.com
20	Aamina	Dillon	9 West Boston Lane	95060	2035745299	adillon@cruise.com
22	Krystal	Walters	583 North Nichols Street	95060	3232591832	kwalters@cruise.com
30	Kaya	Hodge	9572 William Lane	46060	2125271561	khodge@cruise.com
34	Brodie	Gordon	71 Jackson Ave.	46060	9016899813	bgordon@cruise.com
38	Mathew	Horton	1 Rockland Ave.	46060	7195789907	mhorton@cruise.com
71	Leo	Bird	201 Eagle Dr.	12020	7747829407	lbird@cruise.com
73	Fern	Garner	37 Gartner Court	12020	2256254378	fgarner@cruise.com
83	Rebekah	Morgan	9437 East 6th Street	20601	6073928343	rmorgan@cruise.com
85	Malik	Vincent	312 Colonial Ave.	19083	9149573014	mvincent@cruise.com
87	Lyra	Murphy	400 Nut Swamp Drive	19083	3527673126	lmurphy@cruise.com
91	Laila	Christensen	15 Rose Avenue	07501	9017396978	lchristensen@cruise.com
95	Ty	Bell	921 Brook St.	07501	2393336881	tbell@cruise.com
99	Kamil	Lozano	75 N. Golden Star Street	07501	7638554744	klozano@cruise.com
141	Alissa	Ortiz	7756 Fulton Court	23832	2397268929	aortiz@cruise.com
143	Harvey	West	9 Cherry Ave	23832	7326232762	hwest@cruise.com
145	Louis	Giles	598 North Road	28115	2708583758	lgiles@cruise.com
147	Alexa	Preston	9227 North Bow Ridge Street	28115	4098496634	apreston@cruise.com
149	Ethan	Ali	167 NE. Depot Dr.	28115	2245499884	eali@cruise.com
151	Sara	Barron	9064 E. Swanson St.	20601	8707743244	sbarron@cruise.com
153	Awais	Carrillo	225 South Manhattan Street	28079	6369577670	acarrillo@cruise.com
155	Jemima	Miller	9290 Indian Spring Rd.	28079	6206673264	jmillercruise.com
157	Honey	Warren	7946 Leeton Ridge Street	06611	5858531050	hwarrencruise.com
159	Lauren	Morton	7931 Rockaway Street	28079	4476721422	lmorton@cruise.com
161	Floyd	Johns	2 Shore Street	06611	4065842872	fjohnscruise.com
163	Ernest	Higgins	451 Marshall Lane	06611	7637651247	ehiggins@cruise.com

40 rows in set (0.00 sec)

Figure 1 Table employee

```
mysql> select * from cityState;
```

city	state	zipCode
Trumbull	CT	06611
Paterson	NJ	07501
Piscataway	NJ	08854
Ballston Spa	NY	12020
Havertown	PA	19083
Waldorf	MD	20601
Glenarden	MD	20706
Chesterfield	VA	23832
Abingdon	VA	24210
Indian Trail	NC	28079
Mooresville	NC	28115
Clover	SC	29710
Duluth	GA	30096
Jupiter	FL	33458
Nashville	TN	37205
Memphis	TN	38117
Vicksburg	MS	39180
Willoughby	OH	44094
Cuyahoga Falls	OH	44223
Chillicothe	OH	45601
Noblesville	IN	46060
Battle Creek	MI	49016
Jefferson	LA	70121
Covington	LA	70433
Scottsdale	AZ	85260
Ontario	CA	91764
San Marcos	CA	92078
Huntington Beach	CA	92647
Santa Cruz	CA	95060

29 rows in set (0.00 sec)

Figure 2 Table cityState

```
mysql> select * from employeePosition;
```

employeeId	positionId
1	18
2	19
3	20
4	23
5	24
6	28
7	31
8	32
9	32
10	33
11	25
13	29
15	30
16	34
18	21
20	26
22	27
30	22
34	18
38	18
71	19
73	19
83	20
85	20
87	20
91	20
95	20
99	23
141	23
143	23
145	34
147	34
149	34
151	32
153	32
155	32
157	25
159	25
161	28
163	31

```
40 rows in set (0.00 sec)
```

Figure 3 Table employeePosition

firstName	lastName	phone	email	description
Tulisa	Roberts	2025550163	troberts@isp.com	Administrative Jobs
Kaya	Hodge	2125271561	khodge@cruise.com	Aeronautical Engineer
Kamil	Lozano	7638554744	klozano@cruise.com	Aircraft Mechanic
Alissa	Ortiz	2397268929	aortiz@cruise.com	Aircraft Mechanic
Javan	Rennie	2025550139	jrennie@isp.com	Aircraft Mechanic
Harvey	West	7326232762	hwest@cruise.com	Aircraft Mechanic
Krystal	Walters	3232591832	kwalters@cruise.com	Airfield Operations Specialists
JohnPaul	Clarke	2025550153	jpcClarke@isp.com	Airline Ticket Agent
Floyd	Johns	4065842872	fjohns@cruise.com	Airline Ticket Agent
Aamina	Dillon	2035745299	adillon@cruise.com	Airport Planner
Ali	Waters	2025550144	awaters@isp.com	Airport Police
Sara	Barron	8707743244	sbarron@cruise.com	Baggage Handler
Awais	Carrillo	6369577670	acarrillo@cruise.com	Baggage Handler
Maha	Guthrie	2025550161	mguthrie@isp.com	Baggage Handler
Jemima	Miller	6206673264	jmillier@cruise.com	Baggage Handler
Hammad	Newman	2025550157	hnewman@isp.com	Baggage Handler
Nicholas	Pena	7815242242	npena@cruise.com	Cabin Attendant
Ethan	Ali	2245499884	eali@cruise.com	Cleaning Jobs
Louis	Giles	2708583758	lgiles@cruise.com	Cleaning Jobs
Raja	Glass	2319969540	rglass@cruise.com	Cleaning Jobs
Alexa	Preston	4098496634	apreston@cruise.com	Cleaning Jobs
Leo	Bird	7747829407	lbird@cruise.com	Co-pilot
Fern	Garner	2256254378	fgarner@cruise.com	Co-pilot
Umaiza	Melia	2025550135	umelia@isp.com	Co-pilot
Ty	Bell	2393336881	tbell@cruise.com	Flight Attendant
Laila	Christensen	9017396978	lchristensen@cruise.com	Flight Attendant
Rebekah	Morgan	6073928343	rmorgan@cruise.com	Flight Attendant
Lyra	Murphy	3527673126	lmurphy@cruise.com	Flight Attendant
Nico	Prince	2025550137	nprince@isp.com	Flight Attendant
Malik	Vincent	9149573014	mvincent@cruise.com	Flight Attendant
Ernest	Higgins	7637651247	ehiggins@cruise.com	Meteorologist
Dane	Kaiser	2025550155	kdaiser@isp.com	Meteorologist
Dawson	Marquez	7634882879	dmarquez@cruise.com	Passenger Service Agent
Brodie	Gordon	9016899813	bgordon@cruise.com	Pilot
Mathew	Horton	7195789907	mhorton@cruise.com	Pilot
Paris	Lindsey	2025550132	plindsey@isp.com	Pilot
Oliwier	Barnett	2764343958	obarnett@cruise.com	Reservation Service Agent
Raheem	Montgomery	4134849795	rmontgomery@cruise.com	Security
Lauren	Morton	4476721422	lmorton@cruise.com	Security
Honey	Warren	5858531050	hwarren@cruise.com	Security

40 rows in set (0.00 sec)

Figure 4 Join query result set

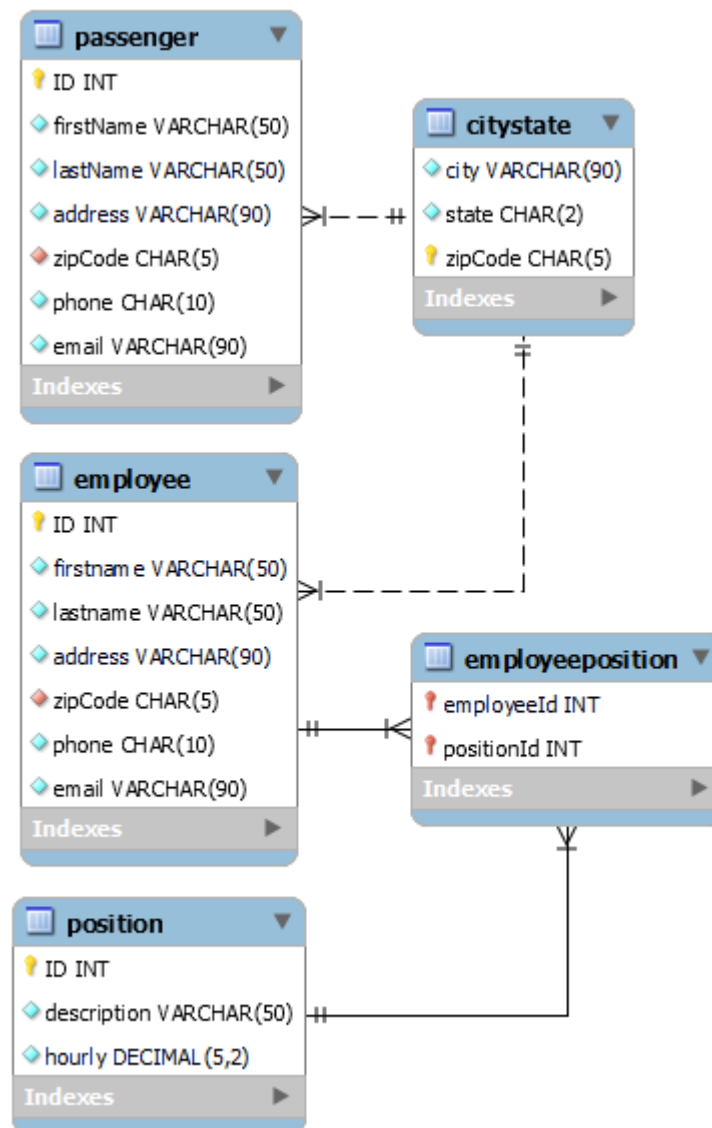


Figure 5 ER Diagram