

s-number:

**Group ID** Student 1

# 2814ICT - DATA MANAGEMENT 7003ICT – DATABASE DESIGN

School of Information & Communication Technology Trimester 1, 2020

# **Assignment Part 2:**

# Designing a Database for **Commonwealth Transport Services**

Date:

#### **ASSIGNMENT TITLE: MYSQL Database Creation & Required Query Identifications**

Full name:

Student 2	s-number:	Full nar	ne:			
Student 3	s-number:	Full nar	ne:			
Course Code:		Worksh	Workshop/Lab day & time:			
Tutor's name	e:	Date su	bmitted:			
Marks obtaine	<b>ed:</b> [For	marker to fill up.]				
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Plagiarism: occ	curs when the work	of another is represen	ted, intentionally or unintentionally, as one's			
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Declaration						
Except where	appropriately ackr	nowledged, this assign	ment is our own work, has been			
			en submitted for assessment. We have			
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Student 1:		Student 2:	Student 3:			
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Signature:		Signature:	Signature:			

Note: All students in the group must sign this first page, scan the signed page, and then place at the beginning of the assignment.

Date:

Date:

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# List of Illustrations

# Acknowledgements:

[List names of staff and students you have discussed with about this assessment.]

- 1)
- 2)
- 3)

# Reports on SQL Queries in Task 3

# Query 1:

SELECT make,model,registration,pssngr\_capacity FROM VEHICLE WHERE availability='YES' ORDER BY pssngr\_capacity ASC;

#### Output table:

make	model	registration	pssngr_capacity	△ 1
Audi	A1	973 OML		3
Volvo	XC90 Premium	459 ABC		4
Toyota	Camry	297 JMB		5
Honda	Odyssey	510 RAK		7

# Query 2:

SELECT \*

FROM LOCATION

WHERE start\_streetName like '% %d' OR end\_streetName like'% %d';

#### Output table:

id	location	start_streetNo	start_streetName	start_suburb	start_state	start_postalCode	end_streetNo	end_streetName	end_suburb	end_state	end_postalCode
4	4	1	Airport Road	texie	Arizona	11165	23D	1st Lane	Gracius	Arizona	1432H
3	3	23D	1st Lane	Gracius	Arizona	1432H	4	Temple Road	Reeves	Arizona	1476J
1	1	23D	1st Lane	Gracius	Arizona	1432H	4	Temple Road	Reeves	Arizona	1476J

# Query 3:

Country & Language in Understandable English >>>

SELECT OFFICIAL.name, COUNTRY.country, LANGUAGE.language FROM OFFICIAL INNER JOIN COUNTRY on COUNTRY.cn\_code = OFFICIAL.country INNER JOIN LANGUAGE on LANGUAGE.ln\_code = OFFICIAL.preffered\_lng ORDER BY OFFICIAL.name;

Country & Language in ISO format >>>>

SELECT name, country, preffered\_lng FROM OFFICIAL ORDER BY name;

#### Output table:

name 🔺 1	country	language
Don Ruksh	China	Chinese
Jake boi	Australia	English
Joey Tribbiani	India	Hindi
Prathap Costa	France	French
Rose Miller	Germany	German

name 🔺 1	country	preffered_lng
Don Ruksh	CN	ZH
Jake boi	AU	EN
Joey Tribbiani	IN	HI
Prathap Costa	FR	FR
Rose Miller	DE	DE

Figure 1: Country & Language in Understandable English

Figure 2: Country & Language in ISO format

## Query 4:

SELECT MAINTANANCE\_REPAIR.date, VEHICLE.registration, VEHICLE.make, VEHICLE.model FROM MAINTANANCE\_REPAIR

INNER JOIN VEHICLE on VEHICLE.vin = MAINTANANCE\_REPAIR.vehicle\_vin WHERE MAINTANANCE\_REPAIR.nature='M' AND date IN (SELECT max(date) FROM MAINTANANCE\_REPAIR);

#### Output table:

date	registration	make	model
2020-06-11	918 YYH	Ford	Transit Luton

## Query 5:

SELECT name, travelled\_kms FROM DRIVER WHERE travelled\_kms>1000 ORDER BY travelled kms ASC;

#### Output table:

name	travelled_kms 🔺 1
Pitt Grey	2500
Brad Jey	5000
Mike Payoe	10000

## Query 6:

SELECT VEHICLE.registration, VEHICLE.make, VEHICLE.model, MAINTANANCE\_REPAIR.cost FROM MAINTANANCE\_REPAIR

INNER JOIN VEHICLE on VEHICLE.vin = MAINTANANCE\_REPAIR.vehicle\_vin WHERE nature='R'

HAVING cost > avg(cost) IN (select avg(cost) from maintanance\_repair WHERE nature='R');

#### Output table:

registration	make	model	cost
510 RAK	Honda	Odyssey	100

# Query 7:

SELECT OFFICIAL.name, OFFICIAL\_ROLE.role
FROM OFFICIAL\_ROLE
INNER JOIN OFFICIAL on OFFICIAL.official = OFFICIAL\_ROLE.official\_id
WHERE NOT EXISTS (SELECT \* FROM TRIP WHERE OFFICIAL\_ROLE.official\_id = TRIP.official);

## Output table:



# Query 8:

SELECT vehicle\_vin, sum(cost) as total, nature FROM MAINTANANCE\_REPAIR GROUP BY vehicle\_vin,nature ORDER BY total DESC LIMIT 2;

#### Output table:

vehicle_vin	total	nature
HONDAN33345678GANB	124.5	R
FORDAN59105678TORH	110	M

## **Bibliography** [Optional]

- 1. Course Material
- 2. https://gist.github.com/bradtraversy/c831baaad44343cc945e76c2e30927b3
- 3. https://stackoverflow.com