## INFO503 - Project 2 (Practical)

**Total marks: 100** Contributes 10% toward the final course work.

## This assessment relates to the following learning outcome(s):

2. Structured Query Language.

Time allowed: 1 week

**Submission:** Upload on moodle before the start of the session (week 12).

Demonstrate/explain the code to the tutor in class

## **INSTRUCTIONS**

Complete the tasks for INFO503 Project (Practical) and **upload it on moodle** (Under Assessments) by the due date.

- This is an individual project. This is **NOT** a group project.
- You will be submitting one file named *Project 2 <your name>.sql* which will contain the script to perform the tasks in the questions given.
- Please add your **name** and **student id** as comment at the start of the script.

A gentle reminder – as per the academic regulations you are not allowed to submit another student's work (either by directly copying it or by typing another students work into your script) – any such act will be deemed cheating.

You may be asked to explain how you did the work and to explain the code in the following lab session. If you are not able to satisfactory explain you will receive a mark of zero for that part. You will be awarded the mark for each question answered correctly otherwise you will score 0 marks for the question.

For each of the query, ensure that the column heading is as shown in *italics* in the questions.

- 1. Write a query (or queries) to show the number of entries in each table in the database.
- 2. Write a query to show all information of staff in the STAFF table that started before 23-Jan-2017.
- 3. Write a query to show the staff in the STAFF table that have left. Show all columns.
- 4. Write a query to show all details of female staff in the STAFF table that have left.
- 5. Write a query to show the *Charge Code, Description,* and *Hourly Rate* of all charges for casual patients (in the description).
- 6. Write a query to show the *Charge Code, Description,* and *Hourly Rate* of all charges which does not have *casual* patient in it (in the description).
- 7. Write a query to show the highest hourly rate, the lowest hourly rate and the average hourly rate for the charges applicable. Name the columns *Highest Rate, Lowest Rate, Average Rate* respectively. Format all the columns to show dollar sign and 2 decimal spaces (\$99.99).
- 8. Write a query to show the duration rate for each charge. Show the *Charge Code, Hourly Rate, Duration* and *Duration Rate*. *Duration Rate* will be calculated (= Hourly Rate \* Duration / 60). Format the *Duration* Rate column to show dollar sign and 2 decimal spaces (\$99.99).
- 9. Write a query to show the *Staff Id, Speciality Id, Date Qualified, Valid Till Date,* and *Days Valid. Days Valid* will be calculated using the *Date Qualified* and *Valid Till Date.*
- 10. All charges are due within 21 days after they had the consultation (*Date Consulted*). Write a query to show the *Staff Id, Charge Code, Date Consulted, Patient Num,* and *Due Date. Due Date* will be calculated using the *Date Consulted* + 21.
- 11. Write a query to show *Staff Id, Speciality Id, Speciality Name, Date Qualified* and *Valid Till Date* for all specialities.
- 12. Write a query to show the *Staff Id, Patient Num, Date Consulted, Start Time*, and Hourly *Rate* for all consultations.
- 13. Write a query to show the Staff Id, Staff Full Name and Speciality Id of all male staff.
- 14. Write a query to show the *Staff Id, Speciality Name, Speciality Notes* of all staff which relate to *surgery* or *surgeon*. Name this column *Details*. (Hint: look up for *Surge* or *surge*).
- 15. Write a query to show the *Staff Id, Patient Num, Charge Description, Time* for all consultations after 9.45 in descending order of the *Staff Id*

- 16. Write a query to show the *Staff Id, number of consultations*. Name the new column *Num of Consults*.
- 17. Write a query to show the *Staff Id, number of consultations* only for staff that have more than 2 consults. Name the new column *Num of Consults*.
- 18. Write a query to show the *Speciality Id, Number of staff* with that speciality. Name the new Column *Num with Speciality*. Display in descending order of *Num with Speciality*.
- 19. Write a query to show the *Speciality Id, Number of staff* with that speciality of those specialities with more than 2 staff. Name the new Column *Num with Speciality*. Display in ascending order of *Num with Speciality*.
- 20. Write a query to show the *Staff Full Name, Number of specialities.* Name the new Column *Num Specialities.* Sort it by *Staff Full Name.*
- 21. Write a query to show the *Staff Full Name, Number of specialities* of all male staff with more than one speciality. Name the new Column *Num Specialities*.

22. V	Write a quer	y to show th	ie <i>Staff Id, St</i>	aff full Name	e, Speciality I	d, Speciality	<i>Name</i> for all	staf

**PROJECT 2 - Tentative Marking Schedule** 

Question	Student checklist	Marks				
1	select	3				
2	condition	3				
3	condition	3				
4	condition	3				
5	condition, heading	3				
6	condition, heading	3				
7	calculation/aggregate, heading/format	3+3				
8	calculation/aggregate, heading/format	3+2				
9	calculation, heading	4				
10	calculation, heading	4				
11	join, heading	4				
12	join, heading	4				
13	join, condition, heading	6				
14	join, conditions, heading	7				
15	join, condition, sort, heading	7				
16	aggregate, heading	3				
17	aggregate, heading, condition	4				
18	aggregate, heading, sort	4				
19	aggregate, heading, condition, sort	5				
20	aggregate, heading	4				
21	aggregate, heading, condition	6				
22	join 3 tables	6				
	Script named correctly Comments used throughout Good scripting technique used	3				
<b>TOTAL Marks (Project) : 100 marks</b> Contributes 10% towards the course						