TORRENS UNIVERSITY AUSTRALIA

ASSESSMENT 2 BRIEF	
Subject Code and Title	MIS602 Data Modelling and Database Design
Assessment	Database Implementation
Individual/Group	Individual
Length	N/A
Learning Outcomes	The Subject Learning Outcomes demonstrated by successful completion of the task below include: b) Design solutions applying relational database techniques to complex problems and communicate these solutions to all stakeholders.
Submission	**12 Week Cycle:** Due by 11:55pm AEST/AEDT Sunday end of Module 4.2 (week 8) **6 Week Cycle:** Due by 11:55pm AEST/AEDT Sunday end of Module 4.2 (week 4)
Weighting	35%
Total Marks	100 Marks

Task Summary

In this assessment, you are required to demonstrate your ability to understand the requirements for various data information requests from an existing database and develop appropriate SQL statements to satisfy those requirements.

Context

Being able to query a database is a fundamental skill that is required by all information systems professionals who work with relational databases. In this assessment, you will utilize the basic query skills that are typically used to extract information for analysis, reporting and data cleansing in a data management setting. Timely provisioning of key business information promotes effective communication and enhanced solution delivery.

Task Instructions

Please read and examine carefully the attached MIS602_Assessment 2_Data Implementation_ Case study and then derive the SQL queries to return the required information. Your focus should be providing the output as meaningful and presentable possible. Please note extra marks will be awarded for presentation and readability of SQL queries.

Please note all the SQL queries should be generated using MySQL server either using MySQL workbench or MySQL Command Line Client.

Provide SQL statements and the query output for the following:

No	Question	Marks
1	List the total number of connections made.	**2 Marks**
2	List all the staff whose address contains the character string 'st' ignoring the case.	**3 Marks**
3	List all the customers who are not active.	**3 Marks**
4	Which plan gives the second biggest data allowance?	**3 Marks**
5	List the staff who gets more than the average hourly rate.	**3 Marks**
6	List the top two selling plans.	**3 Marks**
7	List all the customers on "Extra small" plan.	**5 Marks**
8	From which towerId was the most recent call made?	**5 Marks**
9	List all the customers who owned a phone of the same colour as the customer 'Rajoo' (i.e. surname).	**5 Marks**
10	List all the customers (customer Id and name) having more than one mobile number.	**5 Marks**
11	The company decided to re-name the budget3 plan to budget3Extra. (a) How many customers will be affected? Show SQL to justify your answer. (b) Write an SQL query which will update the database to reflect the upgrades?	**5 Marks**
12	List the names of all the staff who have a supervisor, along with their supervisor's name.	**5 Marks**
13	Who is the longest serving staff? Display the StaffId, full name, date joined and the total years served.	**3 Marks**
14	List all plans that have never been used by any customer. Show the query using: i. Nested Query ii. SQL Join	**5 Marks**
15	List the customer ID, customer name, phone number and the total number of hours (assume call duration is in seconds) the customer was on the phone during August of 2019 from each phone number the customer owns. Order the list from highest to the lowest number of hours.	**5 Marks**
16	i. Create a view that shows the popularity of each plan (i.e. how many plans are on each phone). ii. Use this view in a query to determine the most popular plan.	**5 Marks**
17	List the total number of connections made on each tower location after 2018.	**3 Marks**

18   List all the details of the most recently joined and oldest joined Samsung phone user.   **5 Marks**

19   Produce a list of staff who joined on the same month. Order the result in the following format: **5 Marks**

Month	JoinedDate	Name
July	2012-07-12 00:00:00	TERRENCE IANJAMIESON
July	2012-07-21 00:00:00	VINCENZOKNOL
March	2012-03-09 00:00:00	PATRICK MICHAELMARZELLA
March	2012-03-18 00:00:00	MICHAEL JOHNSCANLON
September	2012-09-23 00:00:00	CATHERINE MARYPORTELLI
September	2012-09-15 00:00:00	GLENDA JEANKHOR

20   In not more than 200 words, explain at least two ways to improve this database based on what you have learned in weeks 1-8. Draw specific examples from the database to support your argument.   **7 Marks**

Total	**85 Marks**

Submission Instructions

1.   The database used for this assignment is available in 'MIS602_Assessment 2_Database SQL Files' folder. Please download the files from this folder.

2.   Copy and paste all the SQL questions into a word document. Under each question provide the corresponding SQL query, the first 10 lines of the result and the output as evidence of running the query. Submit the word document via the **Assessment** link in the main navigation menu.

Referencing

It is essential that you use appropriate APA style for citing and referencing research. Please see more information on referencing here http://library.laureate.net.au/research_skills/referencing

Submission Instructions

Submit Assessment 2 via the **Assessment** link in the main navigation menu in MIS602 Database Modelling and Database Design. The Learning Facilitator will provide feedback via the Grade Centre in the LMS portal. Feedback can be viewed in My Grades.

Academic Integrity Declaration

I declare that except where I have referenced, the work I am submitting for this assessment task is my own work. I have read and am aware of Torrens University Australia Academic Integrity Policy and Procedure viewable online at http://www.torrens.edu.au/policies-and-forms
I am aware that I need to keep a copy of all submitted material and their drafts, and I will do so accordingly.

Assessment Rubric

Assessment Criteria	Fail (Unacceptable) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advanced) 75 -84%	High Distinction (Exceptional) 85-100%
➢ *Correct and complete queries* ➢ *Display only required information* ➢ *Demonstration of additional AQL knowledge* *100%*	Queries are incorrectly answered with marks only sufficient to attain a F(ail).	Queries correctly answered with sufficient marks to attain a (P)ass	Queries correctly answered with sufficient marks to attain a (C)redit. Display only required information.	Queries correctly answered with sufficient marks to attain a (D)istinction. Display only required information Display additional SQL knowledge such as column formatting, table alias, additional calculations etc	Queries correctly answered with sufficient marks to attain a (HD) High Distinction. Display only required information. Display additional SQL knowledge. Well formatted queries. Results returned in a meaningful order.