DATA2001 Database Systems

Summary

Title	Assessment 1
Type	Practical Skills
Due Date	Monday of Week 2
Length	500 words maximum
Weighting	10%
Academic Integrity	GenAI tools **MAY NOT** be used to write your assignment.
Submission	Word document submitted to Turnitin AND submitted to Grade Centre.
Unit Learning Outcomes	This assessment task maps to the following Unit Learning Outcome: *ULO1*: write and execute SQL queries for a relational database

Rationale

In this unit, you will to learn how to access and start to use the SQL language and create databases. Through hands-on tasks, you'll learn to navigate database management tools and write SQL queries, essential skills for managing and understanding data in professional settings. This practical approach ensures you're not just learning theory but applying it in real-world scenarios.

This Assessment provides an essential check to make sure that you can access the database server, so that you can start to use the SQL language and create databases for this unit.

Task Description

You will access a database using PhpMyAdmin in your cPanel account, create SQL queries, and run them. Your task includes documenting the process and results in a portfolio document for submission.

Task Instructions

Important: If, after following the instructions below, you cannot access cPanel; please get in touch with your tutor or unit assessor ASAP. To complete this Assessment, you must access and use the Portfolio document in the Assessment Tasks and Submissions area of Assessment 1.

Part A - Accessing the Database

1. Login in to your cPanel account. You should have done this following instructions in Module 1 'Getting Started with MySQL'. If you have not accessed this before, please refer back to Module 1 'Getting Started with MySQL' for to setup instructions.
2. Open DB1BigDatabase and navigate around it to investigate its structure
3. Where indicated, take screenshot(s) and add them to your portfolio document
4. Answer questions 1, 2 and 3 in your portfolio document.

Part B - SQL Queries

1. Run designated SQL queries, adjusting as necessary for personalisation, i.e., including your details as required.
2. Where indicated, document each query and its results with screenshots and add them to your portfolio document.

Query #1:

1. In the DB1BigDatabase, run the SQL query below:

```
SELECT * FROM CUSTOMER
ORDER BY LastName, FirstName;
```

2. Copy and paste the query into your portfolio document under Query #1, under 'Query Script'.
3. Create and paste a screenshot of your screen showing the result (output) into your portfolio document under Query #1, under 'Query Result'.

Query #2:

1. Type and check/run the following SQL query:

```
SELECT * FROM CUSTOMER
WHERE LastName LIKE 'C%'
ORDER BY LastName, FirstName;
```

2. Customise the query to filter by your first name initial, i.e. replace **C** above with your initial.
3. To enhance your grade, consider adding more customization to your queries, such as incorporating additional columns or filters.
4. Copy and paste your final query into your portfolio document under Query #2, under 'Query Script'.
5. Create and paste a screenshot of your screen of the result under Query #2, under 'Query Result'.

Query #3:

1. Browse the information in the other tables in the database.
2. Create a new query based any table(s) to demonstrate your understanding of the use of the SELECT, WHERE and ORDER BY in SQL. You may choose to filter it by something else, show other columns, or sort it differently.
3. Check that the output is formatted well, showing data in a logical sequence.
4. Copy and paste the query into your portfolio document under Query #3, under 'Query Script'.
5. Create and paste a screenshot of your screen of the result under Query #3, under 'Query Result'.

Resources

You are provided with a portfolio template document in the Assessment 1 folder. You must rename the document with your own name for submission:

DATA2001_Ass1_PortfolioTemplate_YOURNAME.docx

Task Submission

You must submit your Assessment 1 portfolio document to the Turnitin Link titled:

- Assessment 1: Practical Skills

This link can be found in the Assessment Tasks and Submissions section of the Blackboard DATA2001 site. Only Microsoft Word documents will be accepted.

You must rename your submission with *your surname and initials* as follows, e.g.

DATA2001_Ass1_SetonC.docx

Academic Integrity

At Southern Cross University academic integrity means behaving with the values of honesty, fairness, trustworthiness, courage, responsibility, and respect in relation to academic work.

The Southern Cross University Academic Integrity Framework aims to develop a holistic, systematic, and consistent approach to addressing academic integrity across the entire University. For more information see the SCU Academic Integrity Framework.

NOTE: **Academic Integrity breaches include** unacceptable use of generative artificial intelligence (GenAI) tools, the use of GenAI has not been appropriately acknowledged or is beyond the acceptable limit as defined in the Assessment, poor referencing, not identifying direct quotations correctly, close paraphrasing, plagiarism, recycling, misrepresentation, collusion, cheating, contract cheating, fabricating information.

At SCU the use of GenAI tools is acceptable, *unless it is beyond the acceptable limit as defined in the Assessment Item by the Unit Assessor*.
GenAI May Not be Used. Generative Artificial Intelligence (GenAI) tools, such as ChatGPT, **may not be used** for this Assessment Task. You are required to demonstrate if you have developed the unit's skills and knowledge without the support of GenAI. If you use GenAI tools in your assessment task, it may result in an academic integrity breach against you as described in the Student Academic and Non-Academic Misconduct Rules, Section 3.

Special Consideration
Please refer to the Special Consideration section of Policy https://policies.scu.edu.au/document/view-current.php?id=140

Late Submissions & Penalties
Please refer to the Late Submission & Penalties section of Policy
https://policies.scu.edu.au/view.current.php?id=00255

Grades & Feedback
Assessments that have been submitted by the due date will receive an SCU grade. Grades and feedback will be posted to the 'Grades and Feedback' section on the Blackboard unit site. Please allow 7 days for marks to be posted.

Assessment Criteria
For full marks, your document should include the query script/text that you used and should include a screen shot showing the expected result. Take care to use the correct syntax/ use/ spelling of keywords, or ; at the end of row. Incorrect use will result in your queries not working correctly.

This assessment maps the following criteria to ULO 1

Access your cPanel database - essential for learning SQL
Understand Data Structures (Questions 1, 2, 3)
Run SQL Query (Query 1)
Customising SQL Queries (Queries 2 and 3)

Please see the Assessment Rubric on the following page for further information.

Assessment Rubric

Marking Criteria and % allocation	High Distinction (85–99%)	Distinction (75–84%)	Credit (65–74%)	Pass (50–64%)	Marginal Fail (35-49%)	Fail (1-34%)	Not Addressed (0%)
Access server and run SQL Query using DB1BigDatabase 30%	Provides a clear and well-presented screenshot showing the successful execution of the provided SQL query. The screenshot demonstrates proficiency in accessing the database and executing SQL queries without errors.	Provides a screenshot showing the successful execution of the provided SQL query with minor issues or discrepancies. The screenshot displays adequate proficiency in accessing the database and executing SQL queries.	Provides a screenshot showing the execution of the provided SQL query with some errors or inefficiencies. Despite minor issues, the screenshot demonstrates competence in accessing the database and executing SQL queries.	Provides a screenshot showing the execution of the provided SQL query, but with significant errors or misunderstandings evident in the results. The screenshot indicates basic competence in accessing the database and executing SQL queries.	Provides a screenshot showing difficulties or errors in executing the provided SQL query, leading to significant inaccuracies or misinterpretations. The screenshot suggests limited understanding of accessing and interacting with a relational database.	Fails to provide a screenshot demonstrating the execution of the provided SQL query, or the screenshot shows completely incorrect results. Lacks fundamental understanding of accessing and interacting with a relational database.	
Understanding of tables and columns. 30%	Provides a comprehensive and accurate description of the database structure, including all tables, columns, primary keys, and relationships. Demonstrates an advanced understanding of database design principles.	Describes the database structure accurately, with minor omissions or inaccuracies. Shows a clear understanding of table relationships and column purposes.	Describes most aspects of the database structure adequately but may miss some details or misunderstand certain relationships.	Provides a basic description of the database structure but lacks depth or accuracy. Shows limited understanding of table relationships and column purposes.	Provides a vague or incomplete description of the database structure, with significant inaccuracies or misunderstandings. Demonstrates a weak grasp of database concepts.	Fails to describe the database structure accurately or coherently. Shows a complete lack of understanding of table relationships and column purposes.	No Evidence provided.
Customising SQL Queries. 40%	Creates customized queries with exceptional accuracy, complexity, and creativity. Queries are perfectly tailored to the given scenarios and produce precise, insightful results.	Customizes queries effectively, demonstrating a strong understanding of SQL syntax and problem-solving skills. Queries address the given scenarios appropriately and generate meaningful results.	Customizes queries adequately, though with some errors or inconsistencies. Queries may lack complexity or fail to fully address the given scenarios but still produce relevant results.	Attempts to customize queries but with significant errors, inaccuracies, or limitations. Queries may partially address the given scenarios but often produce irrelevant or incorrect results.	Struggles to customize queries effectively, resulting in largely irrelevant or incorrect results. Shows limited ability to apply SQL concepts to practical scenarios.	Fails to customize queries properly or completely. Queries are irrelevant, incorrect, or syntactically flawed, indicating a severe lack of SQL proficiency.	Not attempted