Southern Cross University

School of Business and Tourism

Database Systems (CSC72001)

Assignment 2:	Student Enrolment Database
Due Date:	11.30pm Friday Week 7
Submission:	Upload report (including query results) and SQL script via MySCU
Weight:	15% of overall unit assessment

A. Task Description

A.1. Overview

Your task is to create and test a database in MySQL using PhpMyAdmin. You are provided with a scenario and supporting documents, describing the requirements that Southern Cross University may have for a database to handle their student enrolments. You are provided with most of the design for such a database and will need to create a relational database to meet the client needs. You will also need to add sample data and create SQL queries to provide results suitable for reporting.

A.2 Scenario

Southern Cross University provides a variety of Bachelor degrees to students studying internally across campuses at Coffs Harbour, Lismore and the Gold Coast, as well as by online education. Student enrolments and their progress in units need to be stored in a database.

A systems analyst has partially designed this database (see Entity Relationship Diagram provided). You have been brought into the project to finish creating and testing the database to support SCU needs. Additional to the ERD, SCU has provided you with some lists and details about what information needs to be stored for enrolment and recording of student results. Some of the data for each of these lists has been provided in the file SCUStudentEnrolment.xlsx, included with this assessment. The client had provided you with as much as they know about the data requirements. As with most client-provided data, much information is duplicated in the sample data (the data is not normalised), and the spreadsheets do not reflect the finished database table design.

You will have to decide on and set the data-types and lengths, as well as finish the design of the database. In addition to storage of information about students, courses (such as Bachelor of IT), units (such as CSC72001), staff and workshops, you must allow for the following:

A.2.1 Record student enrolment in a course, including enrolment date;
A.2.2 Record student enrolment in a unit, including the Session and the type of enrolment (internal or external);
A.2.3 Record student enrolment in a workshop;
A.2.4 Record student assessment submission, with date submitted and marks given.

B. Assessment Requirements

B.1 Assignment 2 Report — 2 marks

Using the ERD supplied and the data requirements provided in the Excel file, you must analyse the database needs of the client. You should provide an explanation of your database decisions or data you feel is relevant in your Assignment 1 report. Some suggested headings for this report are included in the report template (available in this assignment folder):

- Client Business Rules
- Assumptions Made
- Naming Conventions
- Data types chosen

B.2 MySQL database — 5 marks

Create a MySQL database using phpMyAdmin. **You must name this database as your username followed by A2.** For example: eyuwon10A2.

You will build the required tables, columns, data types and relationships based on your analysis. You are free to add any tables you feel are needed or would enhance the system. You must include, but are not limited to, the client's specific data requirements. You may choose to add additional data columns to store other information about students, teachers, etc if you wish to do so.

B.3 Test Data — 1 mark

You must provide enough ***valid*** data in your database to run the SQL queries below successfully with at least **5-10 resulting rows.** In particular, association tables will need to be sufficiently populated to give meaningful test results. You may refer to the provided sample data for references on the data format. However, you need to analyse and transform the sample data to be suitable for your database, e.g. you will be required to use your assumption on some fields that are not available in the sample data.

B.4 Export Script — 1 mark

You must create an export script (.sql) to create a backup of all database structures, including table definitions and data.

B.5 Proof of Testing — 1 mark

The results of your report queries should be added to your Assignment 2 report (see B1). This can be a screen dump of each query result inserted into your report, but MUST be readable. You should paste each query into your report, then the results of that query.

B.6 SQL Queries:

B.6.1 Workshop enrolment list **1 mark**

Create a query to display the workshop enrolment lists for all students enrolled in Session 3, 2019. The result should include the session, unit code, unit name, campus location, workshop day & time, tutor name, student number and student name. The result should be sorted by the unit code, campus location, workshop day and time then student last name and first name.

B.6.2 Workshop count list **1 mark**

Create a query to display the number of students who were enrolled in workshops in all sessions for 2019. The result should include the session, unit code, unit name, campus location, tutor name and the total count of students enrolled. The result should be sorted by the Session, unit code, campus location and workshop day & time.

B.6.3 Student Transcripts **1 mark**

Create a query to display the information required for a Student Transcript. The result should include the student number, student name, year, session, unit

B.6.4 Student Assessment Totals **2 marks**

Create a query to display the total marks for each student's assessments in all sessions for 2019. The result should include the student names, unit code, the sum of marks given for their assessments and the final grade given. It should be sorted by the student's last name and first name, session, and unit code. Note: the final grade is entered by the unit assessor into the database, not calculated automatically from the total.

C. Other Notes

C.1 Marking Criteria

Marking Criteria will be made available via a rubric on the MySCU website.

C.2 Submission Format

You will be required to submit your assignment materials both on the Infotech server, and via the MySCU unit site. Your assignment submission should be in the form of a Word document and a SQL script text file. Your Word document should be named as your username_A2.doc or username_A2.docx. (eg: eyuwon10_A2.docx) Your SQL script should be named as your username_A2.sql (eg: eyuwon10_A2.sql).

C.3 Original work

This assignment must be completed individually and must be your own original work.

Exchange of ideas with other people can be considered educationally valuable however excessive collaboration will be regarded as plagiarism, which is a University offence. For example, the copying of significant parts of a document (or database) even if subsequently modified, is plagiarism. Such academic dishonesty will be penalised in accordance with the University's rules and regulations. The assessment process may require some students to attend an interview in order to explain aspects of their assignment.

C.4 Retain duplicate copy

You are strongly advised to retain a copy of original work, and progressive versions of your work during the Session. In the event of any uncertainty regarding the submission of assessment items, you may be requested to reproduce a final copy and/or any previous versions of your work.

C.5 Penalty for late submission

A penalty of 10% per calendar day will be applied to all late assignments. An extension of time will only be considered (not necessarily approved) when a written request is submitted with appropriate supporting documentation and in accordance with University guidelines.

C.6 Marks and Feedback

Marks and feedback comments will be returned through your MySCU site for this unit.