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| **Assessment Number** | **2** |
| **Assessment Type (and weighting)** | **Implemented database solution- Written Project Output-(50%)** |
| **Assessment Name** | **Coursework Tracking System** |
| **Assessment Submission Date** | *TBC / Week-15* |

**Learning Outcomes Assessed:**

LO3: Produce a DDL constructs to implement a relational data model meeting given requirements

LO4: Create DML constructs to manipulate a relational data model to meet given requirements

**Use of Generative Artificial Intelligence (GAI) Applications in this Assessment**

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| AI Status | Application | Notes |
| Category A | No GAI tool is permitted. | While grammar and/or spell checkers may be used to correct individual words and sentences, the use of GAI is not allowed. This is because the learning outcomes require you to produce original assessment work without any GAI assistance.  Any GAI generated content which is presented as your own original work and is not acknowledged will be assessed for academic misconduct. |

**Assessment Brief**

The assessment components for this assignment is an Implementation document as mentioned below. You are required to submit an MS-Word document describing all stages of the implementation stages of the project. This should include all the steps you have followed to convert your design (assignment 1) into a fully functional database using MySQL Workbench. This is worth 50% of your overall grade for this module. Word Count for the coursework is: 1500 (+/- 10%)

**Instructions:**

* All work must be submitted on Moodle by the due date. Turnitin similarity score must not exceed 20%.
* The assignment must be in MS Word format which complies with academic standards and includes appropriate section headings.
* Reference sources must be cited in the text of the report and listed appropriately at the end in a reference list using Harvard referencing style
* Late submission within 7 days after the expiry of the initial deadline is allowed but will incur a 10 marks deduction penalty. Any submission past this period will not be marked unless a formal submission extension has been authorised.

Based on the case scenario of **Coursework Tracking System** for which you have produced a design document in assignment 1, you are now entering into the Physical Design stage in terms of developing a relational database for the given client. In this part, you will need to explain, with evidence, the process you followed to implement your database design. You need to show evidence of ability to translate a design into a functional database.

Use your understanding of **Structured Query Language** studied in this module to accomplish the below tasks. You are free to include any assumptions for the scenario given to meet the requirements with justification.

**Task 1: Video [LO3 & LO4]**

Provide SQL statements for the below tasks. A suitable video is to be created to show the execution of the below tasks. Screenshots to be provided for task 2 and the discussion to be carried out as discussed in the video with suitable in-text and details references. **The link to the video to be provided in the Appendix. The SQL codes created to be attached in the appendix as well as a zip file.**

**Task 2: SQL Codes with Demonstration in the class [LO3 & LO4]**

a. Implement the design created earlier in assignment 1 to show all the physical relations with required attribute, data type, constraint and any other relevant details.

b. Display the details of assignments to be submitted by the student as a part of the course.

c. Provide a complete listing of the due dates for assignments for respective Instructors.

d. Show complete details of assignments and the reminders for the assignments approaching.

e. Provide a complete listing of assignments submitted with details of course (Modules) and the instructors.

f. To access specific details from the databases, create views to show case the required details to provide restriction on the data.

g. To optimize the database solution, create procedures/ triggers to implement the search/ manipulate operation.

h. As security is of concern for the user, provide suitable implementation to meet the requirements.

**Task 3: Personal Reflection [LO3 & LO4]**

You are required to provide reflections on the implementation of the design for the case scenario in terms of the learning, challenges faced in the design implementation and how these are addressed by you by evidence by signposting in the report.

**Note: ASSESSMENT DELIVERABLES**

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|  | **Assessment item** | **Due Date** | **Weight** |
| Coursework-Report | LO3 & LO4: **Written Project Output** | *Week 15* | 50% |

**Minimum Secondary Research Source Requirements:**

**Level HE4** - It is expected that the Reference List will contain between **five and ten sources**. As a MINIMUM the Reference List should include **one refereed academic journal** and **three academic books**

**Declaration:** At the end of the assessment you should also include a declaration of any software tools including Generative AI (GAI) applications that you used in developing and completing the assessment.