

| Sub. | Re-Sub |
|------|--------|
| √    |        |

## Assignment Brief Submission&Resub

| LOs                                   | L02   | L03                            |
|---------------------------------------|---|--------------------------------|
| Grade " Sub"                          |   |                                |
| Grade "Resub"                         | P   | Not Achieved<br>" repeat unit" |
| Student Name:                         |   | ID Number                      |
| Unit Number and Title:                | ICT 214   | Introduction to Database       |
| Qualification                         | Higher Diploma in Information and Communications Technology (ICT) (Y2). |                                |
| Academic Year:                        | 2023/2024   | Assessor Name                  |
| Assignment Title                      | Design Database Schema  | Internal Verifier Name         |
| Assignment No.                        | 2   | Issue Date                     |
| Submission Format<br>Type of Evidence | Documentation, Interview<br>sheet                                       | Submission Date                |
|                                       |   | 15/12 /2023                    |
|                                       |   | 25/ 12/2023                    |

## STUDENT DECLARATION

### Plagiarism

Plagiarism is a particular form of cheating. Plagiarism must be avoided at all costs and students who break the rules, however innocently, may be penalised. It is your responsibility to ensure that you understand correct referencing practices. As a university level student, you are expected to use appropriate references throughout and keep carefully detailed notes of all your sources of materials for material you have used in your work, including any material downloaded from the Internet. Please consult the relevant unit lecturer or your course tutor if you need any further advice.

### Student Declaration

#### Student declaration

I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.

**Also, I acknowledge that I have received the feedback about my work from the assessor.**

Student signature:

Date: / /2023

#### FORMATIVE FEEDBACK

Assessor's Formative Feedback:

Confirm action completed:

Assessor Signature: dr. Rasha Elstohy

Date: 15/12/2023

#### IV assessment brief approval

IV's signature: Dr.Ghada Maher

Date: / /2023

| Learning Outcomes and Assessment Criteria:  |   |  |   |
|---|---|--|---|
| Learning Outcome  | Pass  | Merit  | Distinction   |
| <b>LO2 Describe and locate the major components of the relational data model</b>                    | P5 Define the basic concepts surrounding a relational database<br>P6 Identify elements of relational database, including details of DB Constraints: key, domain, referential integrity.<br>P7 Explain the underlying theory, such as mathematics and logic, relevant to database relational model | <b>M2</b> solve problems regarding intersection, conjunction, union and other mathematical operations, between table tuples using relational algebra   | <b>D2</b> Analyze the factors that influence on good relational database schema.            |
| <b>LO3 Design a database management system using a relational model to meet client requirements</b> | <b>P8</b> Prepare a design for a relational database management system to meet client requirements.<br><b>P9</b> Match normalization and integrity rules to this design   | <b>M3</b> classify a database modeling technique for a single entity class, a one-to-one (1:1) relationship between entity classes, a one-to-many (1:M) relationship between entity classes, a many-to-many (M:M) relationship between entity classes, and recursive relationships | <b>D3</b> Construct well-structured normalized ERD upon a specific case study requirements. |

### Scenario

Consider you are database designer and you have to design a professional relational data model upon the case study you have selected at your capstone project in such domain related to industry, commercial, education, social and more.

#### **Task1: as a DB administrator**

- 1-Describe reasons of why you database considered relational database
- 2-Identify your database constraints: key, domain, referential integrity.
- 3-Explain Relational Algebra Operations may be used for your relational model
- 4-Solve problems like SELECT, PROJECT, UNION, INTERSECTION, and MINUS should be applied between tuples.
- 5-Analyze factors influence your database efficiency.

#### **Task2:**

- 1- Prepare an abstract design for your relational schema considering system requirement
- 2- Match any of any of normalization first level or second level applying on your schema
- 3- Classify your relationship types such as 1:1 and 1:m and recursive relationship
- 4- Contrast your database ERD model after normalization

**Note: Sources of information that you can use in answering the task are:**

- Lecture Note.
- Unit Reference
- [https://www3.ntu.edu.sg/home/ehchua/programming/sql/Relational\\_Database\\_Design.html](https://www3.ntu.edu.sg/home/ehchua/programming/sql/Relational_Database_Design.html)

**Higher Nationals - Summative Assignment Feedback Form**

|  |                                   |   |                        |
|--|-----------------------------------|---|------------------------|
| <b>Student Name</b>  |                                   | <b>Student ID</b>                         |                        |
| <b>Unit Title</b>  | ICT 214- Introduction to Database |   |                        |
| <b>Assignment Number(x of y)</b>   | 2                                 | <b>Assignment Title</b>                   | Design Database Schema |
| <p><b>Assessor Summative Feedback:</b> Feedback should be against the learning outcomes and assessment criteria to help students understand how these inform the process of judging the overall grade. *should be constructive and useful including:</p> <ul style="list-style-type: none"> <li>- Feedback should give full guidance to the students on how they have met the learning outcomes and assessment criteria</li> </ul> <p>a) Strengths of performance</p> <p>b) Limitations of performance</p> <p>c) Any improvements needed in future assessments</p> |                                   |   |                        |
| <b>Assessor Signature:</b>   |                                   | <b>Date:</b> /      / 2023                |                        |
| <b>Re-submission Date</b>  | /      / 2023                     | <b>Actual Date Received Re-submission</b> | /      / 2023          |
| <p><b>Resubmission Feedback:</b></p> <p>*Please note resubmission feedback is focussed only on the resubmitted work</p>  |                                   |   |                        |
| <b>Assessor Signature: Rasha</b>   |                                   | <b>Date:</b> /      / 2023                |                        |
| <b>Internal Verifier's Comments:</b>   |                                   |   |                        |
| <b>Signature:</b>  |                                   | <b>Date:</b> /      / 2023                |                        |

\* Please note that grade decisions are provisional. They are only confirmed once internal and external moderation has taken place and grades decisions have been agreed at the assessment board.

Summative Assignment Feedback Form