

**Faculty of Engineering & Built Environment**  
**School of Electrical Engineering and Computing**  
**COMP1140: Database and Information Management**

**Assignment 2: Mega Pizza Project –  
Logical Database Design**  
Draft Due in class week  
***Due: Week 9 4pm, Thursday, 20<sup>th</sup> August 2020***

**WORTH 15% of final course assessment mark.**

In this assignment, steps in the logical database design are conducted (as described below) as well as revising the requirement analysis and conceptual design of assignment 1, and a report is written.

This assignment has 3 parts as specified below.

1. Revise requirements and EER diagram in Assignment 1, based on:
  - i. Either the EER Model submitted for your Assignment 1. Revise it based on feedback provided by your marker, or
  - ii. Alternatively, complete the partial EER model given at the end of this file, to meet the system requirements.
2. Map the EER model to the relational model. Document the relational schema in DBDL (Sample format is given below)

**ISBN** (id, number, itemNo)  
**Primary Key** id  
**Alternate Key** number  
**Foreign Key** itemNo **references** Book(itemNo)  
**ON UPDATE CASCADE, ON DELETE CASCADE**

3. Normalize the schema to Boyce-Codd Normal Form (if any relation is not already in BCNF). The final normalised schema must be documented in DBDL.

The **final report** should include the following:

1. Reflection on your assignment 1 submission: briefly summarise your assignment 1 marker's comments and suggestions, describe major places you will improve in this submission on assignment 1 content.
2. Requirement Specification (including data requirements, transaction requirements and business rules).
3. EER Diagram and Data Dictionary
4. The relational model mapped from EER (i.e., before normalisation)
5. Normalized Relational Schema in DBDL. Ensure that normalisation steps are shown if any.

**Method of submission:** Softcopy submission is required:

- zip all required files into one zip file (including the project report, the project database SQL backup file, and any files you consider as part of the assignment).

The file name MUST be identified by 4 sections: A2, your first name, your surname, and your student number, e.g., A2SimonLee1234567.zip

- It must be submitted to Moodle -> Assessment 2
- NIC AssessmentItemCoverSheet is to be included

**Note:** Ten percent of the possible maximum mark for the assessment item will be deducted for each day or part day that the item is late. This applies equally to week and weekend days. Assessment items submitted more than five days after the due date will be awarded zero marks.

Partial EER:

