

**Faculty of Engineering & Built Environment  
School of Electrical Engineering and Computing**

**COMP1140: Database and Information Management**

**Assignment 2: Popular Pizza Project - Logical Database Design**

***Due: 10 am, Tuesday, September 12, 2017***

**WORTH 10% of final 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. Requirement Specification (including data requirements, transaction requirements and business rules).
2. EER Diagram and Data Dictionary
3. The relational model mapped from EER (i.e., before normalisation)
4. Normalized Relational Schema in DBDL. Ensure that normalisation steps are shown if any.

**Method of submission:** Both softcopy and hardcopy submissions are 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 Blackboard -> Assessment -> AssignmentsSubmission -> Assignment2.
- Print the document, hand in the hardcopy to the lecturer at the beginning of the course lecture of the due week. The hard copy must have on the front a signed

copy of the cover sheet which is available from:  
[http://www.newcastle.edu.au/\\_\\_data/assets/pdf\\_file/0008/75383/AssessmentItemCoverSheet.pdf](http://www.newcastle.edu.au/__data/assets/pdf_file/0008/75383/AssessmentItemCoverSheet.pdf)

**Note: please make sure to fill in your Tutorial Group (i.e., time), Tutor Name,** as well as other items.

**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. Weekends count as one day in determining the penalty. Assessment items submitted more than five days after the due date will be awarded zero marks.

**Please note:**

**Zero mark** will be given if you donot submit both hardcopy and softcopy.

If your hardcopy submission and softcopy submission are not at the same time, the time of the later submission will be counted as your assignment submission time.

Partial EER:

