Assignment 1 – Marking Scheme For Students
Comp1140
School of SEEC, University of Newcastle, S2, 2020
Marks: out of 150 (Note: Assignment1's weight is 15 for the course)

PART 1: Requirements (70 marks)

- **Data Requirements (**47 marks**):**
  All data elements that have to be captured within the system and short descriptions of what is stored in each field should be shown. As for the business rules the data elements should be placed in groups (typically these groups will be VERY similar to our entities in the EER).
  The perfect answer would also cross-reference the business rules to data elements and groups of elements.
  Should discuss the same entities as in EER, with attributes.

- **Business Rules** (12 marks)

  We will be looking to see that the rules are accurate, complete, understandable (to users/clients not just to IT professionals), and grouped into coherent areas (e.g. rules relating to borrowing, rules relating to purchases of equipment and so on). Make sure to include all the business rules stated in the assignment specification and discussed in the lecture.

- **Transaction Requirements** – (11 marks)

  Much the same criterion that exists for the Business Rules, except of course that transactions are the processes that result in changes to data. This means that several business rules could relate to a single transaction and vice-versa. The perfect answer would also cross-reference the business rules to transactions.

  It should include reasonable Data Manipulation Operations - basic data manipulation (such as insert/delete for all data types) for all data, and reasonable Queries (at least 10 queries that are related to the operation of the system).

PART 2: EER Model with data dictionary (75 marks)

- **EER model/diagram** (47 **marks**)

  Note: *Make sure to use a larger black font (12-14Pts pts) in EER (yet don't be too big, so that you can put whole EER in one or two page(s)). Visio default fonts and colours are not good for hard copy and compact/resize entities.*

  All of the business rules which are express-able in terms of "relationships" must be reflected in the EER.
  The student should demonstrate that they understand all of the elements within an EER, including cardinality, keys, and foreign keys, and use the appropriate entity types/relationships within the diagram (for example entity-sub types where appropriate). Entity names should be meaningful and reflect the business vocabulary rather than using IT terms.
  The diagram should be understandable for an IT professional and "explainable" for the client (by "explainable" it means that it should be sufficiently clear that a good IT analyst should be able to sit with the client and explain the various parts of the model in a way that they can understand and improve if there are errors).

And finally, the EER should be clearly based on and preferably cross-referenced to the other elements of the user requirements. This cross-referencing is a very important way to verify the completeness and integrity of the EER.

- **Data dictionary (**28 **marks)**
  Note: the data dictionary should be judged on whether it's derived from your EER. If it's right, based on your EER (no matter whether the EER is 100% right), full mark will be given.

  - **Entity types** (8 marks)
  - **Relationship types** (8 marks)
  - **Attribute types** (12 marks)

Report Writing (style, grammar, and make sure all letters and drawings are legible, etc.) (5 marks)