

**Assignment 1 – Marking Scheme For Students
Comp1140**

School of SEEC, University of Newcastle, S2, 2018

Marks: out of 100 (Note: Assignment1's weight is 15 for the course)

PART 1: Requirements (45 marks)

- **Data Requirements (26 marks):**

All data elements that have to be captured within the system should be shown, 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 (10 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).

- **Transaction Requirements – (9 marks)**

Much the same criterion that exist 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.

PART 2: EER Model (50 marks)

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.

- **Entities and attributes, and relationships** 39 marks
- **Documentation of data dictionary** 11 marks

AND: Report writing (style, grammar, etc.) (5 marks)