Faculty of Information Technology School of Information Management & Systems IMS5024 Information Modelling, Semester 2, 2005 Assignment 2

Due during tutorials of week 11, Wednesday 5 October 2005.

Assignment Instructions

Your task is to produce a document containing a set of Object Oriented models as described below. The models are to be based on the case study description in the **Assignment2Ralphs.pdf** which you can download from the Assignment page of the unit web site

You will undertake the assignment individually.

It is reasonable to discuss the assignment with other members of the IMS5024 class but you must be absolutely certain to cite each person as the source of any idea you might receive from them. Every assignment will be scrutinised for evidence of plagiarism.

You are required to produce a document containing the following four models. Use UML notation in all diagrams.

- 1. A Use Case description for the selling of a book process.
- 2. A Class diagram showing relationships, as defined in the Detailed Requirements below, for the relevant classes you can identify in the case study.
- 3. A Sequence diagram for the Use Case of the selling of a book.
- 4. A State Transition diagram for a book.
- 5. Evaluation of the modelling technique (short comings, problems, difficulties, advantages, why good or bad)

Value: 25 marks + 25 marks + 20 marks + 20 marks + 10 marks = 100 marks.

Your assignment mark will be divided by 4 to represent 25% of the unit's total marks.

The assignment is due during your tutorial session in week 11 (Wednesday 5 October).

All model elements of the document are to be created electronically. ie drawing software or CASE tool for all diagrams, word processing for all text. The assignment submission must be in printed document form, bound according to the instructions specified in the **SIMS Assignment Handling Policy/Procedures** to be found at the ASSIGNMENT COVER SHEETS link on the School's home page.

Detailed Requirements

- 1. The Class diagram is to show all classes in their full form but excluding Responsibilities. Include name, attributes and operations. Show the types of associations which exist between the classes (ie dependency, generalisation, aggregation etc). If the diagram spans more than one page be sure to make clear the links between pages.
- 2. The Sequence diagram is to show all messages which are needed for the classes involved to carry out their responsibilities.
- 3. The State Transition diagram must show all possible transitions into and from all valid states of the account.
- 4. All pages of the document except the Front Page must be sequentially numbered.
- 5. The evaluation of the modelling technique should draw on the relevant theory covered during the lectures.