

School of Computing, Napier University

Assessment Brief

1. Module number	SET11106
2. Module title	Information Systems Engineering
3. Module leader	
4. Tutor with responsibility for this Assessment	
5. Assessment	Coursework 2: Practical Coursework: <u>Pine Furniture Company</u>
6. Weighting	50% of module assessment
7. Size and/or time limits for assessment	.
8. Deadline of submission Your attention is drawn to the penalties for late submission	Friday 11 th January 2013
9. Arrangements for submission	<p>Your Coursework must be submitted to the School of Computing Office: Room C34 using the appropriate School of Computing cover sheet (in basket outside School Office).</p> <p>Further submission instructions are included in the attached specification</p> <p>Please ensure you bring your matriculation card with you.</p> <p>Please note that your submission must be anonymous, therefore include only your Matriculation Number. Do not put your name on the title page or in page headers or footers or on forms within the application.</p> <p>You must demonstrate your work to the module leader during w/c 7th January 2013 or earlier</p>

<p>10. Assessment Regulations All assessments are subject to the University Regulations.</p>	
<p>11. Requirements for the assessment</p>	<p>See Attached</p>
<p>12. Special instructions</p>	<p>Coursework assistance will be provided during timetabled laboratory sessions from Week 9 onwards.</p> <p>Your disks will not be returned to you. Please retain an electronic copy of your submission in the event of disk errors etc.</p>
<p>13. Return of work</p>	<p>Mark sheets will be provided within three weeks of submission. Your original coursework will be retained.</p>
<p>14. Assessment criteria</p>	<p>Your coursework will be marked using the marking sheets attached as Appendix C</p> <p>This specifies the criteria that will be used to mark your work. Further discussion of criteria is also included in the coursework specification attached.</p>

Napier University

INFORMATION SYSTEMS ENGINEERING

Module No SET11106
Coursework Specification

Trimester 1: Session 2012 - 2013

The Pine Furniture Company

Learning Outcomes Assessed

The learning outcomes for Information Systems Engineering (SET11106) are as follows:

LO1: Critically appraise the information needs of organisations

LO2: Critically assess the concepts of development stages and methods

LO3: Evaluate possible models, designs and specify elements of existing/proposed systems

LO4: Construct and critically evaluate a system using system construction tool(s)

This assignment primarily assesses outcome 4, and also contributes to understanding of outcomes 1, 2 and 3.

Scenario

The Pine Furniture Company wishes to extend the analysis work (done for Coursework 1 of the module) into a prototype system that will demonstrate the capabilities of the proposed system.

In due course a full web-based system is envisaged but for the meantime a PC-based system is planned to pilot the proposed system. Initial discussions suggest that the system will use the existing small network of PCs plus at least one in a new informal customer browsing area that is currently being constructed that will allow customers to browse the stock items while waiting to be seen.

At this stage your responsibility is to demonstrate the capabilities of a database system and convince the staff of its usefulness rather than to build a complete working system. Your brief is therefore to develop a prototype of the new system and to advise on the management of its further development.

Requirements:

1. Prepare a data model of the proposed system comprising: an Access relationship diagram, a list of the tables, fields, field sizes, field types and keys within them. The relationship diagram should be based on the outline relationship diagram supplied as Appendix A.

[15 marks]

2. Develop a prototype system using Microsoft Access to automate *at least* the following functional requirements:

[75 marks]

Maintain details of:

- the Customers of the Pine Furniture Company
- The furniture items for sale by the company
- Recording of Sales Orders

Provide dialogues for the conduct of client visits:

- if not an existing customer record customer details
- if a registered customer find customer details
- record details of furniture items
- Browse available furniture items including the following searches
 1. By room item used in (Bedroom, kitchen, living room etc.)
 2. Item type (beds, tables, chairs, sideboards etc.)
 3. Price per item
- Record a customer order

Print:

- Report of orders received, including date, customer and items ordered

3. Write a short report (ca 500 words) evaluating the quality of your prototype, in particular detailing further work that will be required for the finished product.

[10 marks]

Notes

- The prototype need pay no attention to the multi-user aspects of the system – the client browse should be implemented as a separate form accessible from a menu.

- Printed reports from the system **must** be available as report previews not direct output to printer.
- The above list of functions is only a suggestion as to the functionality of the prototype. Any additional functions that demonstrate the usefulness or attractiveness of such a system are welcome. Additional functions might include:
 - A password protection system,
 - Different screen styles for different users
 - Management reports including sales analysis by date, item popularity etc.
 - Export of reports to Excel

Submission Materials

Parts 1 and 3 should comprise a submission on paper

The Entity Relationship diagram may be word-processed or may be the Access Relationship Diagram.

(See additional submission notes - Appendix B).

The list of tables, fields, field types and keys may be word-processed or may use the automatic documenting features of Access.

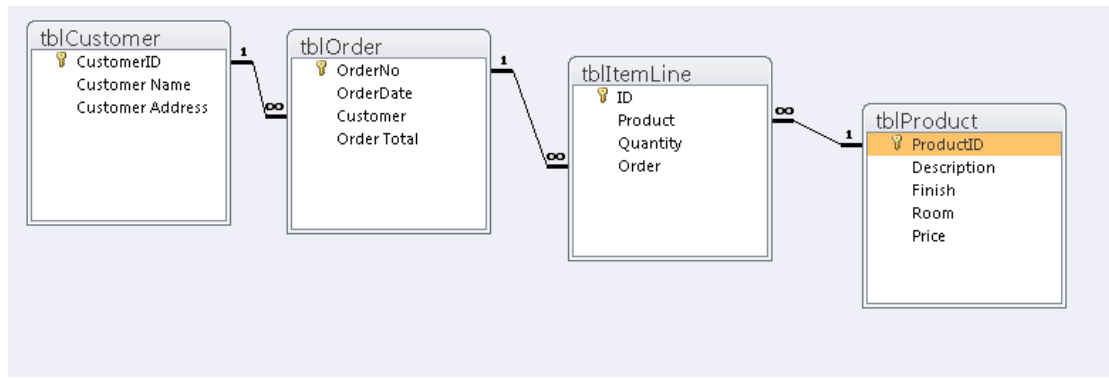
(See additional submission notes - Appendix B).

Part 2 should comprise an Access database on disk (CD, USB pen drive), using an automatic start-up screen as developed in Worksheet 6. As part of the database submission you may also wish to submit printouts of any queries or custom-written macros or VBA code of particular note. (See additional submission notes- Appendix B).

Assessment Criteria

The mark gained will be based on the overall quality of the submission materials, including the overall functionality of the system, usability of forms, extent of input validation and enhancements made to the basic requirements. A specimen marking cover sheet detailing the breakdown of marks is attached as Appendix C.

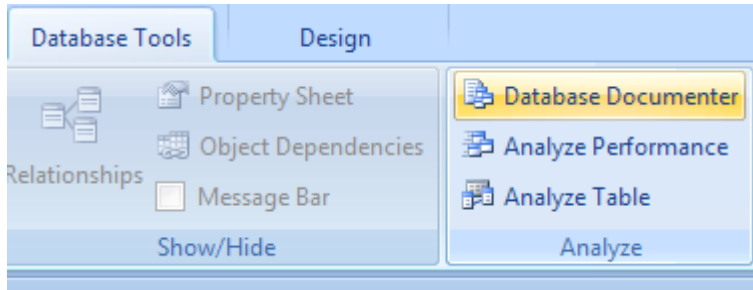
Appendix A – Relationship Diagram



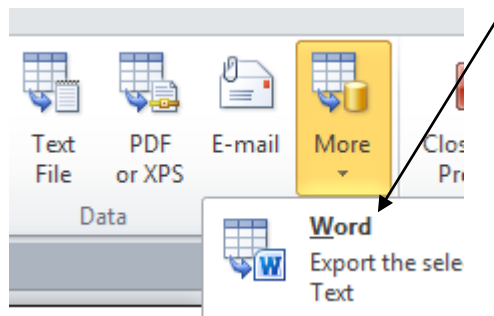
Appendix B - Further submission details

(1) Using the Documenter Tool

Access provides some automated assistance for the creation of system documentation. To activate select **Database Tools: Database Documenter** from the Access menu. This provides a tabbed dialogue for documenting the various features of the database.



To provide a report on tables within your database select **Tables**. Select all the tables in the database and appropriate options (click **Options**)*. Select **only** Names, Data Types and Sizes. The listing provided can be output to Word for editing and printing by clicking the Word icon on the toolbar.



To provide listings of the VBA code within your forms select **Forms** from the dialogue, select the appropriate **Options**, click **OK** and again output to Word.

***Important Note: The Documenter can provide excessive amounts of output. Please edit appropriately for submission.**

(2) Printing Relationships

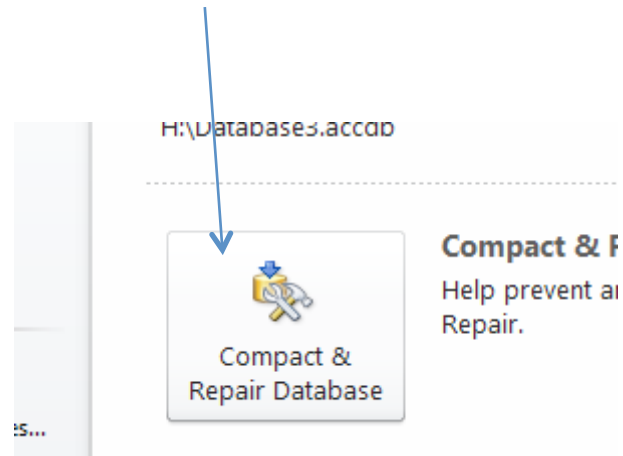
To print the relationships carry out the following steps.

- Select Relationships Report from the Design tab.
- Press Print Screen – this will copy the screen into the Clipboard
- Open “Paint” and paste in the relationships diagram

Appendix B - Further submission details

(3) Compacting the Database

Access occasionally produces very large databases for no apparent reason. If your database is getting excessively big try compacting the database. From the File tab select Compact & Repair Database.



Information Systems Engineering (SET11106)**Trimester 1: Session 2011-2012****Assessment 2: Pine Furniture Company (50% of Module)**

Matriculation No:			
Component	Comment	Weight	Mark
Report: Content: Is the evaluation realistic? <input type="checkbox"/> Presentation: Presented as report? <input type="checkbox"/> Error-free & grammatical? <input type="checkbox"/>		10%	
E-R Model		5%	
Data Dictionary Appropriate: tables <input type="checkbox"/> fields <input type="checkbox"/> field names <input type="checkbox"/> field sizes <input type="checkbox"/> field types <input type="checkbox"/> keys <input type="checkbox"/> foreign keys <input type="checkbox"/>		10%	
Database Functionality Minimum <input type="checkbox"/> New / Existing Customer & product dialogue <input type="checkbox"/> Order recording <input type="checkbox"/> Search <input type="checkbox"/> Reports <input type="checkbox"/> Additional Features <input type="checkbox"/>		45%	
Database Look and Feel Overall impression <input type="checkbox"/> Consistency of Forms <input type="checkbox"/> Appropriate Style <input type="checkbox"/>		30%	
Overall		100%	

Marked By: _____ **Date:** _____