MASSEY UNIVERSITY
MANAWATU CAMPUS

EXAMINATION FOR
158.359 HUMAN-COMPUTER INTERACTION

Semester One 2011

Time allowed: THREE (3) hours

This exam consists of THREE (3) questions

Students are required to answer ALL THREE (3) questions

Marks are shown in brackets, e.g. [5 marks]

THIS IS A CLOSED BOOK EXAMINATION

CALCULATORS ARE NOT PERMITTED
QUESTION 1

(a) **Categorise** the following … according to whether they are … or …. 

    (A) …  
    (B) …  
    (C) …  
    (D) …  
    (E) …  
    (F) …  
    (G) …  
    (H) …  
    (I) …  
    (J) …  

*Your answer should be in the form of a table with two columns, one headed … and the other headed ..., and each of the letters A-J in the appropriate column.*

[5 marks]

(b) Which of the following would you expect to find in …? 

    (A) …  
    (B) …  
    (C) …  
    (D) …  
    (E) …  
    (F) …  
    (G) …  
    (H) …  
    (I) …  
    (J) …  

*Your answer should be in the form of a list of letters chosen from the range A-J.*

[5 marks]

*Question 1(c) continued over...*
(c) You are employed in large software house which has been awarded a contract to produce a new application for ... There are several approaches to providing such a capability.

- Some currently available systems use ... The ... for ... generally has something like the following structure

<diagram omitted>

- The ... may use the ... protocol, in which each ... is represented as ..., and entering that ... causes all the above information to be captured.
- Some ... display a ..., and allow a user to ...

**If you were free to design ... from scratch, what concepts would you include in your system that would maximise its ease of use?** Note that the goal is to improve ease of use, not functionality; adding functions will not gain marks, unless including those functions would make the system easier to use.

You may find it helpful to include a concept sketch. That is, a sketch that gives an idea of how the interface might look, or some other principle that underlies the design, without showing a great deal of detail.

You may assume that your conceptual design is for a "high end" (i.e., expensive!) system that will be deployed in the next two years. In other words, your design can't assume the existence of any new technology, but you don't have to worry about keeping the cost as low as possible.

[15 marks]
QUESTION 2

(a) EITHER

Name three aspects of … that are carried over into …, and give an example of how each … is commonly implemented in ….  

[6 marks]

OR

<scenario omitted>

How would you design an interface so that this problem did not occur?

Note that I'm not asking you to solve the problem of …. I've deliberately omitted the reason for that. I want you to address the problem that ….  

[6 marks]

(b) Ripamov, Cheatham and Runne are diversifying into …. Their idea is that customers should be able to …, and that … will produce a …, and deliver it up to be ….  

You have been given responsibility for … What …, and why would you choose it (or them)?  

[6 marks]

(c) Construct two … for the … application described above. They should explore significantly different aspects of the system.  

[13 marks]
QUESTION 3

(a) What are the main advantages and disadvantages of …? State how you can ….

(i) … [6 marks]
(ii) … [6 marks]
(iii) … [6 marks]

(b) Discuss the specific problems that are encountered …

(i) … [6 marks]
(ii) … [6 marks]

Question 3(c) continued over...
Question 3(c) continued ...

< scenario omitted>

Develop a detailed plan for evaluation based on the DECIDE framework. You must use more than one method. In Step 4 (Identify practical issues) specify in detail exactly what you would do and the contents of any documents handed to the participants (this can be done briefly in bullet points). State any assumptions that you make in your answer.

[20 marks]