

## UNIVERSITI KUALA LUMPUR MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY

# FINAL EXAMINATION JANUARY 2016 SEMESTER

COURSE CODE

: ISB36403

**COURSE NAME** 

: INTERACTION DESIGN

PROGRAMME NAME

: BACHELOR OF INFORMATION TECHNOLOGY

(HONS) IN SOFTWARE ENGINEERING

BACHELOR OF BUSINESS TECHNOLOGY (HONS) IN COMPUTER ENTREPRENEURIAL MANAGEMENT

DATE

28 MAY 2016

TIME

9.00 am - 11.00 am

DURATION

: 2 HOURS

## INSTRUCTIONS TO CANDIDATES

- 1. Please CAREFULLY read the instructions given in the question paper.
- 2. This question paper has information printed on both sides of the paper.
- 3. This question paper consists of TWO (2) sections; Section A and Section B.
- 4. Answer ALL questions in Section A. For Section B, answer ONE (1) question from question 4 or question 5.
- 5. Please write your answers on the answer booklet provided.
- 6. Answer all questions in English language ONLY.

THERE ARE 8 PAGES OF QUESTIONS, INCLUDING THIS PAGE.

SECTION A (Total: 75 marks)

INSTRUCTION: Answer ALL questions.

Please use the answer booklet provided.

#### Question 1

(a) Based on Figure 1, identify FOUR (4) design weaknesses of the website and suggest FOUR (4) recommendations on how to improve its design.



Figure 1: Example of a homepage

(8 marks)

(b) There are two concerns of social and global contexts, i.e. the impact of using information systems on society as well as the context itself while we design an information system. Using a table, discuss THREE (3) existing social issues in respect with its concern and implication for design.

(9 marks)

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(c) Nowadays, no matter short distance and long distance conversations are supported in real-time through voice and typing. For example, video conferencing and chat rooms are the most common means of communication.

 Besides video conferencing and chat room, provide TWO (2) means of communication to support long distance.

(2 marks)

ii. What are the benefits of using the above-mentioned communication? Explain THREE (3) benefits.

(3 marks)

iii. Although communicating online with each other can make life easier, but sometimes there will be some hiccups that are unavoidable. What are the THREE (3) problems or limitations of using real-time communication device?

(3 marks)

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#### Question 2

(a) A simplified model of Human Information Processing includes processors and memories that interact in order to process information. There are three types of processors and two memories. Draw the simplified model of Human Information Processing.

(8 marks)

(b) Gulf is a large difference or division between two people or groups, or between viewpoints, concepts, or situation. Differentiate between gulf of execution and gulf of evaluation.

(4 marks)

(c) "External Cognition refers to the internal and external representations" (Navarro-Prieto et al., 1999). Give THREE (3) examples for external cognition.

(3 marks)

- (d) Anthropomorphism, or personification, is attribution of human form or other characteristics to anything other than a human being.
  - Identify TWO (2) television commercials that apply anthropomorphic elements and ONE (1) example of their product.

(4 marks)

 Although anthropomorphism is giving human characteristic to non-humans, Explain THREE (3) disadvantages of anthropomorphism.

(6 marks)

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### Question 3

(a) Prioritizing your content is one of the best ways to make sure your visitors are finding the information you want them to find, and that they want to find. Based on the following web pages (i – iii), identify which type of organizational scheme used and explain why is it used.

i.



(3 marks)

ii.

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(3 marks)

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iii.



(3 marks)

(b) Requirement gathering is the phase which we find out what the proposed system need. Provide an explanation and example for Usability and Environment types of requirement with explanation.

(4 marks)

(c) You are a project manager in Ardent company, you and your team are assigned to develop an interface of MIIT UniKL Kiosk System for UniKL. In order to make sure a project run smoothly, we have to follow project development lifecycle model. Draw a simple interaction design model and explain each of the phases that related to the project.

(8 marks)

(d) When a project is not developed according any development lifecycle model, what are the **TWO** (2) failures that will be encountered by the stakeholder?

(4 marks)

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SECTION B (Total: 25 marks)

Please use the answer booklet provided.

INSTRUCTION: Answer ONLY one question.

#### Question 4

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(a) Don Norman (1993) mentioned that Interaction Design is absolutely central to the design of application user experiences – whether the desktop, Web, mobile devices, or other handheld devices – and it is the core skill of application designers. Explain THREE (3) points how good design plays an important role in user experience (UX).

(3 marks)

(b) The basic goals of a user interface design are to design and build systems that are effective and meet the needs of users. Describe **TWO** (2) principles of a well-designed user interface.

(4 marks)

(c) Hierarchical Task Analysis involves breaking a task down into subtasks, then sub-sub-tasks and so on. These are grouped as plans which specify how the tasks might be performed in practice. Perform a hierarchical task analysis for cleaning a house included rooms, hall, living rooms. Include all plans in your answer. Express the task analysis textually or graphically.

(10 marks)

(d) An effective interaction designer requires knowing how to evaluate different kinds of system at different stages of development. Developing a system in this way usually turns out to be less expensive than fixing problems that are discovered after the system has been shipped to customers. List and describe the FOUR (4) evaluation paradigms.

(8 marks)

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#### Question 5

(a) As a designer, you have been assigned to develop a collaborative module for lecturers and students that aims to allow them to discuss and evaluate students' assignment remotely for long distance education. Include a sample storyboard that has textual and visual information of the screen. You should have FIVE (5) screen shots. (Note: screen shots should be interactively accompanied by textual and visual information respectively)

(15 marks)

(b) List and briefly describe the THREE (3) types of navigation system for website.

(6 marks)

(c) A user's point of view "Good visual organization makes it easy to locate content". In general, humans infer/conclude organization from the appearance and arrangement of the objects they see. An effective layout reinforces a site's content organization, and the results are easy navigation. Give FOUR (4) principles to achieve a good visual organization.

(4 marks)

**END OF EXAMINATION PAPER** 

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