

THE OPEN UNIVERSITY OF SRI LANKA
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
BACHELOR OF SOFTWARE ENGINEERING



ECI5161 Human Computer Interaction

Final Examination – 2014/2015

(Closed Book)

Date: 05th April 2015

Time: 9.30 – 12.30

Answer question 1 in Part A and any 2 questions from Part B

Part A (Compulsory Question) 50 marks

Question 1

Read the scenario given and answer the questions.

Digital Content Store

You have been asked to design a commercial web-site for digital content store. Users will be able to browse or search for music, video, books, magazines and other digital content and then download it to their hard disks and or associated devices, such as mobile phones or MP3 players.

- a) Describe each task that the users will perform. Draw a Task Hierarchy Diagram. (10 marks)
- b) Create a persona for a common user. (10 marks)
- c) Draw user interface prototypes for the system. It should contain a set of interfaces (at least 4) which satisfy the specified requirements of the digital content store application. (10 marks)
- d) Describe selection of colors, font details and other controls used in the prototype and justify your choices. (10 marks)
- e) How do you use 2 different evaluation techniques to evaluate these prototypes? (10 marks)

Part B (Answer only 2 questions, each question carries '25 marks')

Question 2

- a) Describe user centered design process. What are the draw backs of system centered design process? (10 marks)
- b) Name and explain two proposed theories to explain perception. (10 marks)
- c) Briefly describe link affordance in web site designing. (5 marks)

Question 3

- a) Explain discount usability engineering method. (10 marks)
- b) Describe evaluation methods that can be used in discount usability engineering. (10 marks)
- c) Explain the importance of interviews and questionnaires in usability evaluation. (5 marks)

Question 4

- a) HCI is an interdisciplinary subject. Describe how each of the following disciplines have made contributions to HCI: (12 marks)
- Graphic Design
 - Social and Organisational Psychology
 - Ergonomic and Human factors
- b) Describe the usefulness in graphical coding and color coding in the visual representation. (8 marks)
- c) Briefly describe the five usability attributes defined by Nielsen. (5 marks)