

DUBLIN INSTITUTE OF TECHNOLOGY

DT8265/1 Higher Diploma in Computing
DT8266/1 Masters Qualifier for MSc in Computing
DT8900/1 International Pre Masters for MSc in
Computing

SUMMER EXAMINATIONS 2016/2017

WEB & USER INTERFACE DESIGN [CMPU4063]

MS. ANDREA CURLEY
DR. DEIRDRE LILLIS
DR. MICHAEL O'MAHONY

WEDNESDAY 24TH MAY 9.30 A.M. – 11.30 A.M.

TWO HOURS

INSTRUCTIONS TO CANDIDATES

Answer question (1) and *any two* of questions (2), (3), (4)

Question (1) is worth **40** marks.
Questions (2), (3), (4) are worth **30** marks each

1. (a) Identify all possible *tags* that can be used in the <head> section of a web page. Describe their uses and provide examples. (15 marks)
- (b) What is the meaning of an *escaped character* in HTML? Use examples to support your answer. (4 marks)
- (c) What units are used to size fonts in CSS? State why and when should each be used. (8 marks)
- (d) Outline **two** features that HTML5 has over XHTML. Use examples to support your answer. (8 marks)
- (e) What is the meaning of *Miller's Chunking*, with regard to interface design? Use examples to support your answer. (5 marks)

2. (a) Outline **two** features of CSS3. Use examples to support your answer. (6 marks)
- (b) The CSS positioning properties allow you to position an element. Discuss the **four** positioning methods using code to support your answer. (8 marks)
- (c) Write the correct html code and embedded CSS code for the output in Figure 1.

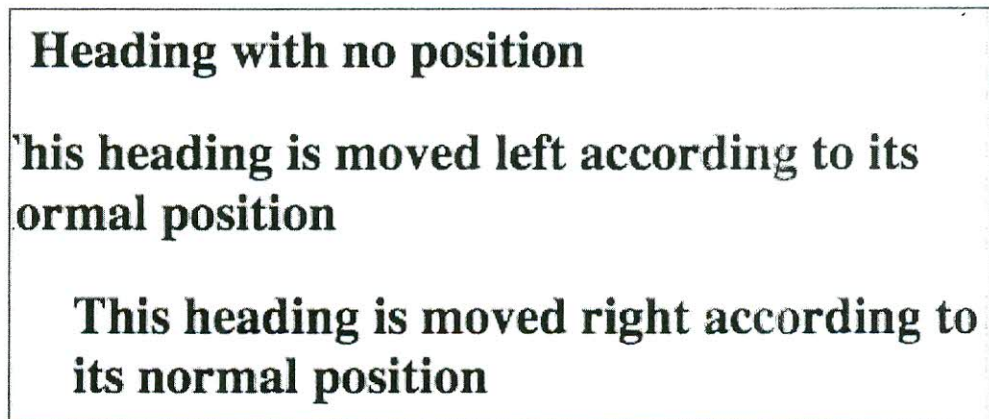


Figure 1.

- (10 marks)
- (d) Discuss **two** techniques for right-aligning a layer. Use code to support your answer. (6 marks)

3. (a) i. The first command to user interface designers is “*know thy user.*” Provide an overall categorization of the **four** different types of user, which a designer should consider.

(12 marks)

- ii. Derive guidelines for each user type that have been identified in (a)(i).

(12 marks)

- (b) What are **three advantages** of *flat design*?

(6 marks)

4. (a) i. What is the meaning of *Mobile-First Design*?

(5 marks)

- ii. Write the CSS code that changes the colour of the background to blue when the width gets *larger* than 768px.

(8 marks)

- (b) Provide three ways of dealing with images responsively. Use code to support your answers.

(12 marks)

- (c) In CSS3, how can the number of columns be specified?

(5 marks)