DUBLIN INSTITUTE OF TECHNOLOGY
KEVIN STREET DUBLIN 8

BSc. (Honours) Degree in Computer Science

Year 1

Semester 2 Examinations 2012/2013

Web Development I

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Duration: 2 hours

Friday 24th May 2013   1.00pm – 3.00pm

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) (i) What is the difference between the *Internet* and the *World-Wide-Web*?

(4 marks)

(ii) Write the html code for the following table:

Name	Telephone	
Bill Gates	555 77 854	555 77 855

(6 marks)

(b) (i) You are designing a web survey form for a client. You need to ask the client to submit a user name and password. What type of form element/s would you use? One of the questions has 6 possible responses. Only one response can be selected per question. What type of form element would you use to configure this question on the web page?

(4 marks)

(ii) Provide the HTML code necessary to create these elements in a form.

(6 marks)

(c) (i) Which following are examples of new HTML 5 elements? Select the two correct answers
    A. <article>
    B. <frame>
    C. <nav>
    D. <font>

(4 marks)

(ii) Which type of HTML list will automatically number the items in the list? Use code to support your answer.

(6 marks)

(d) (i) What is the correct HTML for a horizontal line and what is the correct HTML tab for the largest heading?

(4 marks)

(ii) Name three advantages that layers have over tables.

(6 marks)

2. *LandMark.com* is an architectural salvage web-site. The website has a number of web pages and uses embedded CSS to style each web page. The site uses an image as its background (<img src="Stone.gif" alt="">). The text colour, throughout the web-site, is green (#060) and the background colour is white. The web-site uses tables for its page layout.

(a) Describe *three* advantages in using CSS in a commercial web-site.

(6 marks)

(b) Write the CSS code, to apply the following style characteristics to *LandMark.com*:
- Background image – Stone.gif
- Font colour #060

(4 marks)

(c) How would an external CSS file be referenced in a web page?

(6 marks)

(d) Why would it be advantageous to use <u>CSS in an external file</u> rather than <u>embedded CSS</u> in *LandMark.com*?

(6 marks)

(e) Write the CSS code to apply the following table characteristics to *LandMark.com*:
- Text alignment is centre
- The height of the table should take up the whole page
- The table has no border
- The table width is set to 100%

(8 marks)

(12 marks)

3. (a) Describe *two* reasons for using tables in a web page.

(6 marks)

(b) Write the html code for the following table:

Table for exam question:

Page Header		
Menu	Advertisement Space	
	Main Content Area (Text and Images)	Blog Links
Footer		

(9 marks)

(c) Add three buttons on the "menu" area. When clicking the first button, an alert window display content "Menu 1 has been clicked!"; when double clicking the second button, an alert window display content "Menu 2 has been double clicked!"; when clicking the third button, a prompt box ask for the user's name. When entered and clicking "OK", the page will display "Hello XXX/(user's name as entered), how are you today?". Use JavaScript to help finish those functions.

(15 marks)

4. (a) What are the possible basic elements in a form?

(7 marks)

(b) How can form information be sent in an email?

(4 marks)

(c) Write the html code for the following form:

Please fill in the registration form below:
First name: [   ]
Last name: [   ]

Gender: ◌ Male ◌ Female

What transport equipment do you have:
▢ I have a bike
▢ I have a car

[Submit]

If you click the "Submit" button, the form-data will be sent to a page called "html_form_action.asp".

(9 marks)

(d) What is the html code for an email box in a form?

(4 marks)

(e) Form data can be validated using JavaScript. Write a function to validate if the Customer Name has been entered.

(6 marks)