

DUBLIN INSTITUTE OF TECHNOLOGY  
KEVIN STREET, DUBLIN 8.

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# BSc. (Honours) Degree in Computer Science

Year 1

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SEMESTER 2 EXAMINATIONS 2013/2014

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## Web Development I

Ms. Cindy Liu  
Dr. Deirdre Lillis

Time: Friday-23-May

1.00 p.m. - 3.00 p.m.

Duration: 2 hours

CMPU 1031

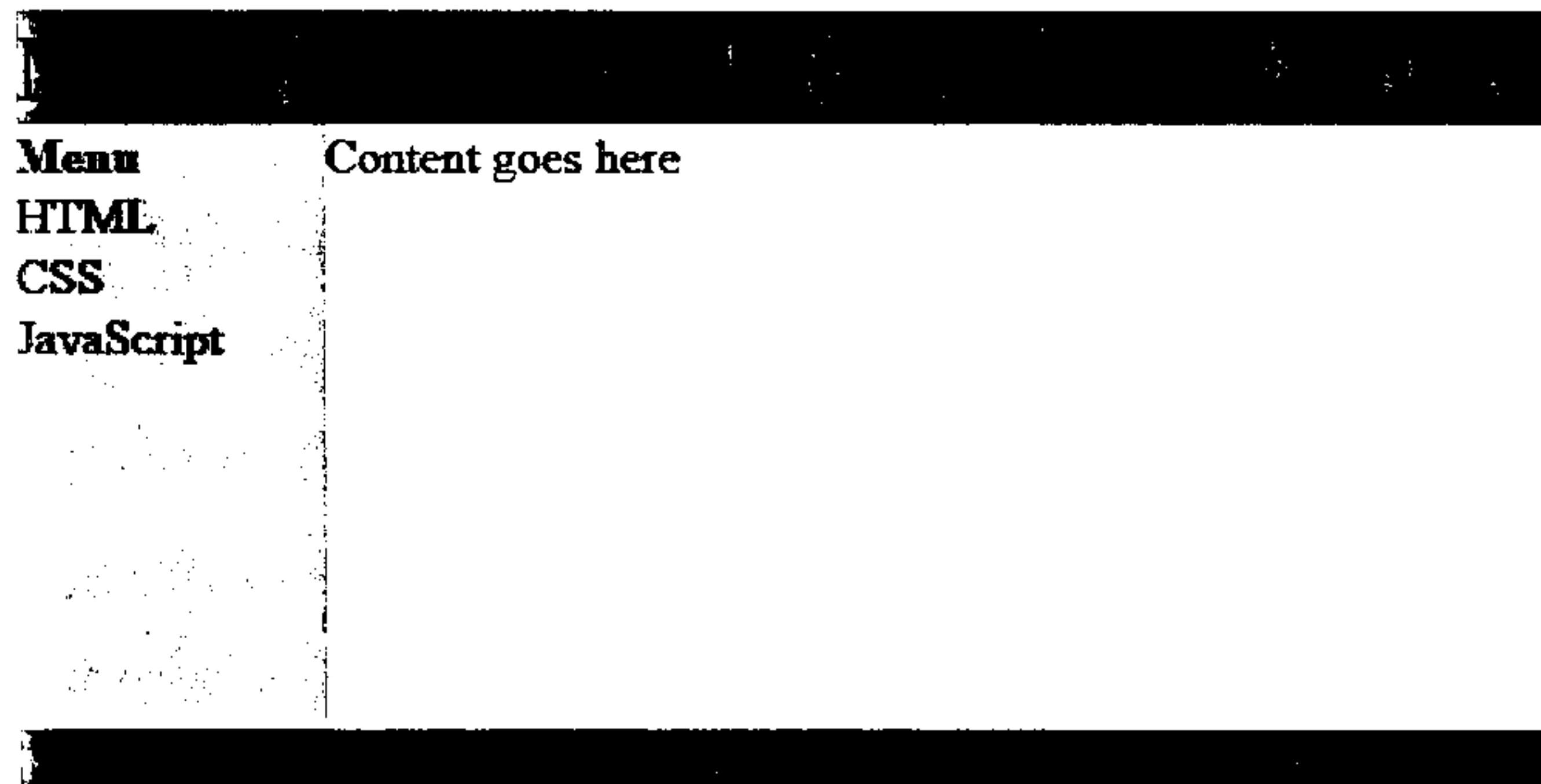
Answer question (1) and *any two* of questions (2), (3), (4)

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) Using <div> write the HTML code for the following page: Header and Footer background colour is #888888, menu background colour is #C0C0C0 and the content background colour is #EEEEEE



(10 marks)

(b) (i) Name three advantages that layers have over tables.

(6 marks)

(ii) 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. The choice can be more than one. What type of form element would you use to configure this question on the web page?

(4 marks)

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

(6 marks)

**(c) (i)** Why does the following page not display in a browser?

```
<!DOCTYPE html>
<html>

<head>
<title>Find the error<title>
</head>
<body>
  <p<H1>>Why do I not display?</H1> <p>

</body>
</html5>
```

(4 marks)

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

(6 marks)

2. *OutDoorLiving.com* is a Garden Center 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 (). 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 of using CSS in a commercial web-site. (6 marks)
- (b) Write the CSS code, to apply the following style characteristics to *OutDoorLiving.com*:
- Background image – greenhouse.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 CSS in an external file rather than embedded CSS in *OutDoorLiving.com*? (6 marks)
- (e) Write the CSS code to apply the following table characteristics to *OutDoorLiving.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 90%
- (8 marks)

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

(6 marks)

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

Page Header		
Advertisement Space	Menu	
	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) In HTML5, which attribute is used to specify that an input field must be filled out?

- (1) placeholder
- (2) required
- (3) validate
- (4) formvalidate

(4 marks)

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

**Form Exam Question**  
  
\* required field.  
  
Name: \_\_\_\_\_ \*  
  
E-mail: \_\_\_\_\_ \*  
  
Website: \_\_\_\_\_  
  
  
  
Comment: \_\_\_\_\_  
  
Gender: ☐ Female ☐ Male \*  
  
Class DT228/3 ▾ \*

(9 marks)

(d) What is the HTML code for a calendar with the date not before 01/09/2013 in a form?

(4 marks)

(e) Form data can be validated using JavaScript. Write a function to validate if the Customer Name has not been entered.

(6 marks)