CITS1231 Web Technologies
Review and Exam Preparation

Overview
• Topics covered in CITS1231
  – Protocols and Client-Server Architecture
  – HTML
  – Multimedia and Image Formats
  – CSS
  – JavaScript and PHP
  – XML
• Exam Format

Protocols and Client-Server
• Understand the two way transaction of Web Surfing
  – Web client
  – Web Server
• Protocols
  – URLs (absolute vs. relative)
  – Difference between WWW and the Internet
  – The protocol/access scheme part of URL

HTML Coding
• Understand the basic structure of an HTML page
• Based a screenshot of a web page, be able to produce HTML code for
  – Paragraph, headings
  – Images
  – Table
  – Forms and Form Elements
  – Lists
  (with reference to a quick reference card)
Multi-media

- General understanding of sound (audio) and video format
- Syntax for inserting audio and video into a webpage (not examinable)
- Image Formats
  - Web Safe Colours
  - Differences between GIF, JPEG and PNG
- Image Maps
  - Client-side vs. Server-side

CSS Concepts

- Understand the need of CSS
- The syntax of three ways of inserting CSS into a web page and when to apply them
  - External
  - Embedded
  - Inline
- CSS Inheritance and how conflict rules get resolved
  - User defined > author defined > browser default (?)
  - Inline > embedded > external
  - Important to override precedence

CSS Coding

- Given a page layout, be able to write CSS code using CSS positioning to produce it.
- Understand and be able to use pseudo-class selectors
  - a:link [...]  
  - a:visited [...]  
  - a:hover [...]  
- A quick reference to CSS properties and usage will be provided.
- CSS selectors
  - p + em {...}
  - P + em {...}
  - p > em {...}  

From CSS Lectures

JavaScript

- Be able interpret simple JavaScript code, for example,
  - a for loop – given a for loop, covert it to a while loop;
  - arrays;
  - accessing elements in a document (e.g. forms[], images[] etc)
- Understand the use of simple JavaScript functions, such as using `new Date()` to create Date objects.
- Understand DOM, and how JavaScript can access objects in an HTML document.
- Understand the basic event model, differentiate various event handlers – onclick, onkeyup and onkeydown, onchange and onsubmit, onmouseover and onmouseout.

JavaScript (Cont.)

- Use example to explain how DHTML works.
- Be able to interpret and coding example to explain how JavaScript works with DOM (and perhaps with CSS) to add dynamics and interactivities for a web page. `setTimeout` is a very useful function in DHTML, e.g. `setTimeout("hideAll()",500)` will call `hideAll()` every 500 milisecond.

PHP

- Understand the advantages and disadvantages of using client-side and server-side programming
- No coding required.

XML

- Understand what XML is, the difference between XML and HTML (or XHTML)
- Given a set of items with common structure (typically a table of the same column names, each row represent an item)
  - Be able to draw an XML document structure based on this table
  - Be able to write an XML file to represent the data
  - Be able to format an XML using CSS
- Understand compound documents and the use of namespace and default namespace
- URLs, URNs and URIs
Exam Format

- Three sections:
  - Section A: 20 Multiple Choice Questions (20 marks)
  - Section B: 5 Long Answer Questions (30 marks)
  - Section C: 2 Coding Questions (50 marks)
- General
  - Please find the HTML and CSS Reference Cards at the back of this exam paper (P23-P30).
  - Please do not tear out any pages from this exam paper.
  - Please use PEN to answer Section B and Section C.
  - You will need to bring a pencil and a rubber for the multiple choice questions.

Exam Format – Section A

Section A: Multiple Choice Questions (20 marks)
There are 20 questions in this section. Each question is worth 1 mark. Candidates should answer ALL questions in this section.

- Identify the letter of the choice that best completes the statement or answers the question.
- Make sure you mark the answers on the separate Multiple Choice Answer Sheet provided.
- This will be marked automatically by a computer program.
- Marks will not be allocated if you answer the multiple choice questions here.

Exam Format – Section B

Section B: Long Answer Questions (30 marks)
There are 5 questions in this section. Each question is worth 6 marks. Candidates should answer ALL questions in this section.

Answers must be written in the space provided.
If there is not enough space, write on the spare pages provided at the end of the paper.
Make sure you clearly indicate the questions you are answering.
Questions are mostly on the second half of the semester.
(Client-side vs. Servers-side, DOM, DHTML, Compound Documents, and etc)

Exam Format – Section C

Section C: Coding Questions (50 marks)
There are 2 questions in this section.
They are worth 20 and 30 marks, respectively.
Candidates should answer ALL questions in this section.

Answers must be written in the space provided.
If there is not enough space, write on the spare pages provided at the end of the paper.
Make sure you clearly indicate the questions you are answering.

20 Marks on XML (6+7+7)
30 Marks on HTML Coding (CSS, Table, Forms, Images)
Thank you!

- Please remember to respond to the SURF survey!

Good Luck!