# CSCI110
# Spring Session 2013

# Assignment 1
# A static web with HTML and CSS
# 8 marks

*Complete "Exercise 1" before attempting this assignment.*

## Aim

This assignment aims to introduce you to the basics of creating a web of documents. These documents are "static"; their content is pre-defined and fixed. You will learn how to use HTML to define the structure of each document (web page), and how to use CSS styling to control the appearance of the documents.

The assignment should be completed in the laboratory using the Ubuntu (Linux) environment.

## Objectives

On completion of this assignment and its associated exercise, you will be able to:

- Use NetBeans to create a web application project that can be deployed onto an Apache web-server.
- Create web-pages that utilize HTML tags to define the page structure.
- Use HTML appropriately for when you later have to write PHP scripts that create pages dynamically.
- Use CSS styling to control the appearance of pages.

## Task

You are to create a basic web-site for a special interest group, sports team, social group, fan club, religious group, MMORPG guild, or similar organization with which you are involved. (If you are not involved in any social group, invent a group that you would like to be involved in.) In past years, students have created web-sites for a skiing club, a fan club for some obscure multi player role playing game, a site for addicts of the 'Tetris' computer game, a parents' baby-sitting cooperative, school-friends' site, motor-bike fanatics club, something for followers of the Indian Premier League, beers that I have loved, (the following year there was a "cheeses I love to eat with beer" matching site) etc. The content text must all be in English.

The site should comprise at least eight HTML pages; these pages should form a simple hierarchy with a top-level index.html page that introduces the special interest group and provides links down to more specific information such as activities (record

of past meetings, future schedule), member profiles, news, or whatever else might be appropriate.  There should be one page detailing your involvement with the group.

The HTML pages and CSS style sheet file(s) are to be created using the editors that are built into the NetBeans environment.  *Do not create text in a word processor like Word and convert to HTML.  Do not use tools like FrontPage or DreamWeaver. Such tools create the HTML markup for you; but you need to learn the tags and their use so that you can later write PHP scripts that generate pages, and Javascript code that manipulates pages.*

Your site is to use all of the following HTML tags:
- Headers – h1, h2, and others
- Paragraphs, ordered and unordered lists, (definition lists as well if you can find an appropriate use)
- Intra-page and inter-page links relating to the site; links to web-sites of related external organizations.
- Blockquotes and/or pre-formatted text.
- Tables for tabular data (No tabular data?  Invent some – membership numbers for 2001-2013, meetings held in 2013, whatever.)
- Embedded images
- An image-map that works with either intra-page or inter-page links.
  Image maps have been used for things like – an image displaying a motor-bike with areas linked to paragraphs detailing its features, a picture of club members with links to very brief biographies.  Try something imaginative.
  You can get the coordinates for an image map by opening your image with Windows "Paint" accessory – but it's a bit tedious.  If you ask Google you will learn of a couple of sites that let you upload an image and then help you compose the HTML defining regions in that image.  (Make sure that you look at the HTML markup generated for the image map, you need to understand how such things work.)

(The use of Javascript and CSS to dynamically change elements of a page is covered later in session.  However, even in this beginning exercise you should start to add <div> sections to give additional structure to your pages – e.g. a <div> for any fixed material that appears at the head of each page, a <div> for main content, a <div> around a table or a list, a <div> for any footer that appears on each page.)

Your site is to utilize a CSS style sheet that:
- Overrides the browser's default styling for things like body background and font colours.
- Defines specific styling for individual page element (HTML tags for these elements will use id attributes) and classes of element (HTML tags for these will use class attributes).
- Sets fonts etc.
- Employs borders or margins to improve the layout of text.

## Assignment report

You do not submit your web pages!

You are marked on a report that you write. This report presents your web site in the form of screen-shots, a few inclusions of things like sample HTML markup and style sheets, along with supplementary explanation and comment. The report should be prepared on a word processor and converted to PDF format. The Open Office word processor on Ubuntu Linux has a "print to PDF" option. There should be Word to PDF converters on the Windows OS. Ubuntu has a snapshot tool (in its accessories menu).

Your report should:
- Start with a one paragraph introduction to the "special interest group" for whom you have built the web site.
- Provide an overview of your web site.
  The diagram of files in NetBeans' "Project" view can act as a starting point.
  List all the files. Explain the conceptual hierarchical structure – the root index.html file and other groups of files. Summarize the navigation links that exist among your files and note external links.
- List the HTML tags that you have employed and identify the pages wherein they are used.
- Include your CSS style sheet and provide a summary explanation of what you were trying to define. (NetBeans has a "print to html" option that can be used with most file types – this gives you output with colour styling etc that can then be cut and pasted into reports.)
- Include three or four screen shots demonstrating your creation of your web pages within the NetBeans editor (these screen shots can be scaled down to 50% size when pasted into the report).
- Include screen shots of each page in your web site (these can again be scaled down to 50% size when pasted into the report).


## Submission

Prepare your report and convert to PDF format as the file A1.pdf.

Submission is done electronically via a program called `turnin` that runs on "banshee" – the main CS undergraduate machine. You must first transfer your A1.pdf file to your home directory on banshee (this is different from the home directory that you access on the Linux machines). You can transfer the file using a SSH file-transfer program. The Ubuntu OS allows you to open a file-browser connected to your banshee home directory – and you can simply drag your A1.pdf file across using the visual file browser.

For CSCI110, assignments are submitted electronically via the `turnin` system. For this assignment you submit your assignment via the command:

```
turnin -c csci110 -a 1 A1.pdf
```

Late submissions would be submitted as:

```
turnin -c csci110 -a 1late A1.pdf
```

The program `turnin` only works when you are logged in to the main banshee undergraduate server machine. From an Ubuntu workstation in the lab, you must open a terminal session on the local machine, and then login to banshee via ssh and run the `turnin` program.


## Marking

The assignment is worth 8 marks total.

- Appearance of report: 1 mark
- Overall appearance and complexity of the web-site and interest level of content: 2 marks
- CSS style sheet (should include context sensitive rules, or element/class specific rules): 1 mark
- Web (intra-, inter- page construction, external links; logical organization; sensible navigation aids): 1 mark
- Other markup utilized appropriately: 1 mark
- Tables: 1 mark
- Imagemap (HTML markup to be listed): 1 mark