Web Technologies
Course Outline, Administrivia, Getting Started at CSSE
An introduction to the Internet and the WWW

Dr Wei Liu
Lecture Overview

• Unit Outline
• Administrivia
• What is the Internet
• What is the WWW
The Web is booming, with new technologies enabling interactive web sites that connect millions of people and create billion-dollar industries seemingly overnight. These web sites use a rich mixture of rapidly evolving technologies to provide the secure, interactive and personalised online experience that today's users enjoy.
From the unit outline

• Web Technologies (CITS1231) provides students with a broadly based understanding of these technologies and how they are most effectively combined, along with hands-on experience in their use.

• Fundamental topics covered in this unit include the client/server paradigm, the internet protocols used to transmit web pages, the markup languages (HTML, XHTML and XML) used to describe document structure and the styling language (CSS) used to control a document's appearance.

• Building on these topics, the unit describes how web sites achieve interactivity and personalisation through server-side scripting languages such as PHP, client-side scripting languages such as Java Script and the combined approach known as AJAX, which is one of the core enabling technologies for Web 2.0.
Contact Hours and getting help

• Lectures (2 one-hour lecture every week)

• Laboratories (starting week 2, three-hour lab with the first two hours supervised)

• Consultation (see the unit web site)
  – Dr Wei Liu (CSSE Rm 2.18)

• admin1231@csse.uwa.edu.au

• help1231 forum
Laboratories

• Laboratory materials will be published on the unit website on the Friday the week prior

• Laboratory will ensure development of skills in (essential to the completion of the Project)
  – Assessing existing websites
  – Designing and developing new websites
  – Programming to add interactivities

• 3 hour lab with the first two hours supervised

• Some laboratory work (about 3 labs) will be required for submission (feedback will be given in labs)
Successful Progress

The following components contribute to the final assessment:

- Practical projects (30%): evaluating existing websites and implementing new websites
- Midterm Test (10%) – Short answer questions
- Final Exam (60%) – Must obtain 40% to pass
Information Resources

• Each Other

• Textbook

• Lectures (there is always some value adding)

• help1231 “bulletin board”

• The Unit Web Pages

• Unit outline

• Teaching Staff
Text Book

Patrick Carey
Comprehensive
ISBN: 978-0-4958-0640-0

A web-aware and web-oriented unit

- web.csse.uwa.edu.au school's home page
- web.csse.uwa.edu.au/current teaching home page
- undergraduate.csse.uwa.edu.au/units/CITS1231/ unit home page
- web.csse.uwa.edu.au/students/units/cits1231 unit outline
Software

Microsoft Expression Web 4
Microsoft MSDN Academic Alliance

- Download from CSSE with license keys for free
  - Under the Microsoft msdn academic alliance software center
  - Look at the FAQs at:

Getting Started at CSSE

During the first week of semester, new students should:

1. CSSE computer account name and password is your student number and Pheme password. You may need to log in and then out of Pheme to force synchronisation. Use bookings/bookings to log into Linux for accessing Pheme.

2. Obtain their timetable from OLCR.

3. Activate their UWA email account.

New students should also read get family with http://web.csse.uwa.edu.au/students/, many useful links are available on this page.
Working with your laptop

• Get Unify connection by visiting this page:

• SNAP co-exist until Unify completes its roll-out
  https://server.snap.uwa.edu.au/

• Both 2.03 and 2.05 have a reasonable number of *wired* SNAP connection points. You can work anywhere in the CSSE building if you have *wireless* Unify connection.

• Read the CSSE school’s FAQ about how to access systems from outside:
  http://web.csse.uwa.edu.au/school_and_systems_information/faq
Surfing the Web

"The Internet really helps with my dieting. When I'm busy surfing the web I have no time to surf the refrigerator shelves."
“Surfing” – A two party transaction

- Web “surfing” is a two party transaction and a classic example of the client-server architecture.
- Your browser is the client, and it communicates with the computer (server) that retrieves what you have requested.
- The information resources existing on the Web are files that are stored on some medium, typically hard disks.
- To access information/files/Web pages you must be connected to a network or “be wired to the Internet”.
- One is “wired” via their work/campus network, or from home via a modem and Internet Service Provider (ISP) and increasingly via wireless means - mobile phones, WAP etc.
Web Servers and Web Browsers

- A Web page is stored on a Web server, which in turn makes it available to the network.

- To view a Web page, a client runs a software program called a Web browser, which retrieves the page from the server and displays it.

- The earliest browsers, known as text-based browsers, were incapable of displaying images.

- Today most computers support graphical browsers which are capable of displaying not only images, but also video, sound, animations, and a variety of graphical features.
Web browser, Web pages, Web server
Computer Science and Software Engineering

Since 1976 our School has produced graduates with expertise in computer programming and the methods involved in performing computations and processing data. We offer research opportunities in visualisation, wireless networks, adaptive systems, formal methods and software engineering.

EVENTS

There are no events scheduled at this time.

More events