CMPT 470 - E100 Web-based Information Systems

Instructor(s): Gregory Baker

Calendar Objective/Description:
This course examines: two-tier/multi-tier client/server architectures; the architecture of a Web-based information system; web servers/browser; programming/scripting tools for clients and servers; database access; transport of programming objects; messaging systems; security; and applications (such as e-commerce and on-line learning).

Instructor's Objectives:
This course will examine the architecture and technology of web-based information systems in a variety of application contexts. It will also serve as a practical introduction to the installation, configuration and operation of secure web services.

Prerequisites:
(CMPT 275 or CMPT 276) and CMPT 354.

Topics:
- Web server configuration: Apache on Linux.
- Web as multimedia and hypertext publication system: markup and style (XHTML/XML, CSS/XSL/XSLT); WWW design issues; HTTP.
- Web as remote user interface in distributed computing systems: client-side scripting (ECMAscript and Java); server-side scripting; database integration; session management; authentication and security.
- Various WWW-related technologies of interest which could include collaborative frameworks (Wikis, DAV), computer-to-computer communication (RPC, SOAP), middleware and enterprise, and emerging XML standards.

Grading:
Weekly exercises 20%; Technology Evaluation 25%; Project 55%. The technology evaluation and project marks will contain both group and individual components. Details of the marking scheme will be discussed in the first week of lecture.

Students must attain an overall passing grade on the weighted average of exams in the course in order to obtain a clear pass (C- or better).

Academic Honesty Statement:
Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).