ICS 425 : Client/Server Architectures

A. Course Description

Credits: 4

Prerequisites: ICS 141 Programming with Objects AND ICS 225 Web Design and Implementation AND MATH 215 Discrete Mathematics

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

This course is a study of scaling client/server applications enterprise-wide. The course examines why ordinary client/server tools do not scale enterprise wide, and examines the extensions necessary in DB linkage, OS extensions, and networking connections necessary for scaling. The MVC II (Model-View-Controller) design pattern and other useful design patterns will be used to explain typical architectural approaches.


C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Allocate parts of an application to the correct part of enterprise web application framework.
2. Develop enterprise web applications using the Model View Controller pattern using an enterprise web application framework.
3. Design an enterprise application for scalability and performance.
4. Implement security features into an enterprise web application.
5. Use the enterprise web application framework and evaluate competing enterprise web application frameworks.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: Students are responsible to both be aware of and abide by prerequisites for ICS courses for which they enroll, and will be administratively dropped from a course if they have not met prerequisites.