CIT 253
Data-Driven Web Technologies

Course Description

This course will provide students with the knowledge and skills to design, implement, and manage a database-driven web site. Topics will include the study of databases and web servers in e-commerce, transaction processing, and client-side and server-side Web scripting. Students will be involved in the creation of a database-driven Web site. Prerequisites: CIT 150, IMD 160, and CIT 170; or consent of instructor.

Course Objectives

Upon successful completion of this course, the student can:
1. Install and configure a web server.
2. Understand the uses of databases in commerce.
3. Understand the implications of transaction processing.
4. Write client-side scripting applications.
5. Write server-side scripting applications.
7. Use scripting and SQL to input and output data from the database.
8. Collect and analyze customer behavior data from a web site.
9. Integrate common database applications such as inventory, billing, and shipping with the web site.

Course Outline

I. Introduction to Web Database Concepts
   A. Database Uses in Commerce
   B. Transaction Processing Concepts
II. Web Servers
   A. Installation of Web Servers
   B. Administration of Web Servers
   C. Web Security Issues
   D. File Transfer Protocol (FTP) Security Issues
III. Web Page Scripting
   A. Client-Side Scripting
   B. Server-Side Scripting
IV. Relational Database Concepts
   A. Types of Data Used in Electronic Commerce
   B. Structured Query Language (SQL) Statements Used to Manipulate Data
   C. Using Scripts to Manipulate Data
V. Database-Driven Web Pages
   A. Inputting Data From the User
   B. Outputting Data to the User
   C. Collecting Data on Customer Behavior
VI. Interfacing the Web With Common Business Applications
   A. Inventory Control
   B. Billing
   C. Shipping