

OBJECTIVES:

The student should be made to:

Be familiar with Web page design using HTML/XML and style sheets
Be exposed to creation of user interfaces using Java frames and applets.
Learn to create dynamic web pages using server side scripting.
Learn to write Client Server applications.
Be familiar with the frameworks JSP Strut, Hibernate, Spring
Be exposed to creating applications with AJAX

LIST OF EXPERIMENTS:***IMPLEMENT THE FOLLOWING:******WEBPAGE CONCEPTS***

- a) Create a web page with the following using HTML
 - a. To embed a map in a web page
 - b. To fix the hot spots in that map
 - c. Show all the related information when the hot spots are clicked.
- b) Create a web page with the following.
 - a. Cascading style sheets.
 - b. Embedded style sheets.
 - c. Inline style sheets. Use our college information for the web pages.
- c) Create and save an XML document at the server, which contains 10 users Information. Write a Program, which takes user Id as an input and returns the User details by taking the user information from the XML document.

SOCKETS & SERVLETS

- a) Write programs in Java using sockets to implement the following:
 - i. HTTP request
 - ii. FTP
 - iii. SMTP
 - iv. POP3
- b) Write a program in Java for creating simple chat application with datagram sockets and datagram packets.
- c) Write programs in Java using Servlets:
 - To invoke servlets from HTML forms
 - To invoke servlets from Applets
- d) Write programs in Java to create three-tier applications using servlets for conducting on-line examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.
- e) Write a program to lock servlet itself to a particular server IP address and port number.

It requires an init parameter key that is appropriate for its servlet IP address and port before it unlocks itself and handles a request

f) Session tracking using hidden form fields and Session tracking for a hit count

g) Install TOMCAT web server. Convert the static webpages of programs 1&2 into dynamic web pages using servlets (or JSP) and cookies. Hint: Users information (user id, password, credit card number) would be stored in web.xml. Each user should have a separate Shopping Cart.

ADVANCE CONCEPTS:

a) Implement a simple program using following frameworks

a. JSP Struts Framework b. Hibernate c. Spring

b) Explore the following application in AJAX: Searching in real time with live searches, Getting the answer with auto complete, Chatting with friends ,Dragging and dropping with Ajax, Getting instant login feedback, Ajax-enabled popup menus, Modifying Web pages on the fly.

c) Write a web services for finding what people think by asking 500 people's opinion for any consumer product

d) Write a web services for predicting for any product sales

TOTAL: 45 PERIODS

OUTCOMES:

At the end of the course, the student should be able to:

Design Web pages using HTML/XML and style sheets

Create user interfaces using Java frames and applets.

Create dynamic web pages using server side scripting.

Write Client Server applications.

Use the frameworks JSP Strut, Hibernate, Spring

Create applications with AJAX

REFERENCE:

spoken-tutorial.org.

LIST OF EQUIPMENT FOR A BATCH OF 30 STUDENTS:

SOFTWARE:

Java, Dream Weaver or Equivalent, MySQL or Equivalent, Apache Server

HARDWARE:

Standalone desktops 30 Nos

Faculty's Signature

HOD/CSE