WEB PROGRAMMING LAB

(Common to CSE & IT)

Course Code : 15CT1123

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Pre-requisites:

Object Oriented Programming through Java

Course Outcomes:

At the end of the Course, the Student will be able to:

CO 1 Get practical exposure on HTML, XHTML, CSS, JavaScript, XML and other web technologies.

CO 2 Get practical exposure to develop XML Technologies such as XML Schemas, XSLT.

CO 3 Get practical exposures to develop Server-Side Programming using Servlets and JSP's.

CO 4 Develop web pages using AJAX and PHP.

CO 5 Develop a website using the above technologies.

LIST OF PROGRAMS:

WEEK-1 & 2

1) HOME PAGE:

The static home page must contain three frames.

Top frame: Logo and the college name and links to Home page, Login page, Registration page, Catalogue page and Cart page (the description of these pages will be given below).

Left frame: At least four links for navigation, which will display the catalogue of respective links. For e.g.: When you click the link "IT" the catalogue for IT Books should be displayed in the Right frame.

Right frame: The pages to the links in the left frame must be loaded here. Initially this page contains description of the web site.

Logo	Website Name			
Home	Login	Registration	Catalogue	Cart
IT CSE ECE EEE				

2) Login Page:

Logo	Website Name			
Home	Login	Registration	Catalogue	Cart
IT CSE ECE EEE	User Name Passward Reset Submit			

3) CATOLOGUE PAGE:

The catalogue page should contain the details of all the books available in the web site in

a table.The details should contain the following:

1. Snap shot of Cover Page.
2. Author Name.
3. Publisher.
4. Price.
5. Add to cart button.

Note: Week 2 contains the remaining pages and their description.

4) CART PAGE:

The cart page contains the details about the books which are added to the cart.

The cart page should look like this:

Logo	Website Name			
Home	Login	Registration	Catalogue	Cart
IT CSE ECE EEE	Book Name Java 2 XML	Price Rs.300 Rs.170	Quantity 1 2	Amount Rs.300 Rs.340
	Total Amount- Rs.640			

5) REGISTRATION PAGE:

Create a "registration form "with the following fields:

1) Name (Text field)
2) Password (password field)
3) E-mail id (text field)
4) Phone number (text field)
5) Sex (radio button)
6) Date of birth (3 select boxes)
7) Languages known (check boxes – English, Telugu, Hindi, Tamil)
8) Address (text area)

WEEK 3:

VALIDATION:

Write JavaScript to validate the following fields of the above registration page.

1. Name (Name should contains alphabets and the length should not be less than 6 characters).

2. Password (Password should not be less than 6 characters length).
3. E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)
4. Phone number (Phone number should contain 10 digits only).

Note: You can also validate the login page with these parameters.

WEEK 4:

Design a web page using CSS (Cascading Style Sheets) which includes the following:

1) Use different font, styles: In the style definition you define how each selector should work (font, color etc.). Then, in the body of your pages, you refer to these selectors to activate the styles.
2) Add customized cursors: CROSS LINK, HELP LINK
3) Set a background image for both the page and single elements on the page. You can define the background image for the page like this: BODY {background-image:url(myimage.gif);}
4) Control the repetition of the image with the background-repeat property. As background-repeat: repeat Tiles the image until the entire page is filled, just like an ordinary background image in plain HTML.
5) Define styles for links i.e., link, visited, active, hover
6) Work with Layers

   For example:

   LAYER 1 ON TOP:

   <div style=”position:relative; font-size:50px; z-index:2;”>LAYER 1

   <div style=”position:relative; top:-50; left:5; color:red; font-size:80px; zindex: 1">LAYER 2

   LAYER 2 ON TOP:

   <div style=”position:relative; font-size:50px; z-index:3;”>LAYER1

<div style=”position:relative; top:-50; left:5; color:red; fontsize:80px; zindex:4">LAYER 2

WEEK 5:

Write an XML file which will display the Book information which includes the following:

i) Title of the book

ii) Author Name

iii) ISBN number

iv) Edition

v) Price

Write a Document Type Definition (DTD) to validate the above XML file. Display the XML file as follows. The contents should be displayed in a table. The header of the table should be in color GREY. And the Author names column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use XML schemas XSL and CSS for the above purpose.

Note: Give at least for 4 books. It should be valid syntactically.

Hint: You can use some xml editors like XML-spy

WEEK 6:

1) Install TOMCAT web server. While installation assign port number 8080. Make sure that this port are available i.e., no other process is using this port.

2) Access the above developed static web pages for books web site, using these servers by putting the web pages developed in week-1and week-2 in the document root. Access the pages by using theurl : http://localhost:4040/rama/books.html

WEEK 7:

Install a database(Mysql or Oracle). Create a table which should contain at least the following fields: name, password, email-id, phone number (these should hold the data from the registration form).

Practice 'JDBC' connectivity. Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page (week1).

Write a java program/servlet/JSP to connect to that database and extract data from the tables and display them.

WEEK 8:

USER AUTHENICATION:

Assume four users user1,user2,user3 and user4 having the passwords pwd1,pwd2,pwd3 and pwd4 respectively. Write a *servlet* for doing the following.

Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the database. If he is a valid user (i.e., user - name and password match) you should welcome him by name(user-name) else you should display "You are not an authenticated user".

COOKIES: Practice a cookie programs to add and read cookies.

WEEK 9:

WRITE A JSP WHICH DOES THE FOLLOWING JOB:

Insert the details of the 3 or 4 users who register with the web site by using registration form. Authenticate the user when he submits the login form using the user name and password from the database& also using cookies.

WEEK 10:

1. Create a simple XML Http Request and retrieve data from a TXT file using AJAX
2. Create an XMLHttpRequest to retrieve data from an XML file using AJAX

WEEK 11:

Design the web pages required for an online book store web site using PHP, AJAX, and HTML5.

REFERENCES:

1. Dietel and Dietel, "*Internet and World Wide Web - How to Program*", 5thEdition, PHI/Pearson Education,2011.
2. Herbert Schildt, "*The complete Reference Java 2*", 8th Edition, TMH, 2011.
3. Phil Hanna, "*The Complete Reference JSP*", 1st Edition, TMH, 2003.