WEB TECHNOLOGIES

LAB Experiments

WEEK 1

Create following web pages

1. Registration page
   a. First name – text box
   b. Last name – text boxes
   c. Gender – radio buttons
   d. DOB – date type input
   e. Email id- email type input
   f. Phone number – tel type input
   g. Address – text area
   h. Year – drop down list (E1, E2, E3, E4)
   i. Select favorite subjects – check boxes
   j. User name – text box
   k. Password – password type input
   l. Confirm password – password type input
   m. Security question – drop down list
   n. Answer – drop down list
   o. Register - Submit button
   p. Reset - Reset button
   q. Upload user picture
2. Sign in page
   a. User name – text type input
   b. Password – password type input
   c. Sign in - Submit button
   d. Sign up - button
         i. Link to registration page
   e. Forgot password – text / label
         i. Link to forgot password page
3. Forgot password page
   a. User name – text type input
   b. DOB – date type input
   c. Email id – email type input
   d. Phone number – tel type input
   e. Security question – drop down list
   f. Answer – text type input
   g. Submit – submit button
   h. Reset – reset button

NOTE: Try to use all the useful attributes with each form element.

WEEK 2

Create following web pages

1. Gallery page
   a. Insert some sample pictures
2. Resources page
   a. Insert sample resources like docs, ppts, pdfs, and videos etc
3. Achievements page
   a. Displays some of your classmates achievements with their photographs
4. Profile page
   a. Display your profile in tabular format
5. Notifications page
   a. Display some sample notifications
6. Footer page
   a. Display footer information like copyright, web site visit count etc

NOTE: Try to use all the useful attributes with each form element.

WEEK 3

Create Home page with five frames

1. Frame 1
   a. Logo, Web site name
2. Frame 2
   a. Links (horizontal) to other main pages of our web site
      i. Profile, Gallery, Resources, achievements
      ii. Navigation
3. Frame 3
   a. Content of the current web page
4. Frame 4
   a. To display Notifications page
5. Frame 5
   a. To display footer page

NOTE: Try to use all important attributes that are associated with iframe tag.

WEEK 4

Apply style sheets for all web pages which were designed during week 1, 2, and 3.

1. Work with borders, fonts, div, span tag
2. Different styles for links
3. Different styles for tables
4. Apply styles for images

WEEK 5

Validate Registration, login, forgot password page using JavaScript

1. First name and last name should contain only characters
2. User name length should be not be less than 6 and greater than 15 characters
3. Password length is of minimum 6 characters and should contain at least one upper case, one lower case, one digit, one special character and it should start with an alphabet only.
4. Email id should be in proper format ---------@-------.-----
5. Phone number should contain only 10 characters.

Note: You can apply validation to remaining form fields also.

WEEK 6

Create an XML file which will display 10 students' information which includes the following

1. Student name
2. University ID
3. Gender
4. Year
5. Class
6. Extra-curricular activity
   a. Yoga/Sports/Music(vocal/instrumental)/Dance/NCC/NSS

Write a Document Type Definition (DTD) to validate the above XML file. Apply formatting to XML file using CSS.

WEEK 7

Install TOMCAT webserver and APACHE. While installation assign port number 4040 to TOMCAT and 8080 to APACHE. Make sure that these ports are available.

Put all the webpages that were designed during week 1, 2, and 3 in document root and access the website from web browser.

WEEK 8 and 9

1. Install MySQL and create table for storing new users' registration information.
2. Use PHP to connect to the database and insert/retrieve data from table.
   a. Store new user's information
   b. Authenticate users' login information
   c. Display/edit user's profile
3. Experiment with various MySQL queries.

WEEK 10

User authentication using servlets and cookies

Assume that four students have logged into the website. Write a servlet for the following acitivities.

1. Create a cookie and add these four student's login information to it.
2. Authenticate the user by validating his/her credentials after comparing them with the information stored in cookie.
3. If the user is a valid user, you should welcome him/her by name else you should display "you are not an authenticated user".

Use init-parameters to do this. Store the user-names and passwords in the webinf.xml and access them in the servlet by using the getInitParameters() method.

WEEK 11

Write a JSP to connect to the database and insert/retrieve data from MySQL table.

    a.   Store new user's information
    b.   Authenticate users' login information
    c.   Display/edit user's profile