

Web Technologies Lab Syllabus

Experiment 1 (HTML Page)

- (a) Create a webpage with HTML describing your department. Use paragraph and list tags.
- (b) Apply various colors to suitably distinguish key words. Also apply font styling like italics, underline and two other fonts to words you find appropriate. Also use header tags.
- (c) Create links on the words e.g. “Wi-Fi” and “LAN” to link them to Wikipedia pages.
- (d) Insert an image and create a link such that clicking on image takes user to other page.
- (e) Change the background color of the page. At the bottom create a link to take user to the top of the page.

Experiment 2 (Tables)

- (a) Create a table to show your class time-table.
- (b) Use tables to provide layout to your HTML page describing your university infrastructure.
- (c) Use `` and `<div>` tags to provide a layout to the above page instead of a table layout.
- (d) Use frames such that page is divided into 3 frames 20% on left to show contents of pages, 60% in center to show body of page, remaining on right to show remarks.
- (e) Embed Audio and Video into your HTML web page.

Experiment 3 (CSS)

- (a) Apply in-line CSS to change colors of certain text portion, bold, underline and italics certain words in your HTML web page. Also change background color of each paragraph using in-line CSS.
- (b) Write all the above styling in CSS in different file (.css) and link it to your webpage such that changes made in CSS file are immediately reflected on the page. Group paragraphs into single class and add styling information to the class in CSS.
- (c) Create a simple form to submit user input like his name, age, address and favorite subject, movie and singer.
- (d) Add few form elements such as radio buttons, check boxes and password field. Add a submit button at last.

Experiment 4 (JavaScript)

- (a) Create a form similar to the one in previous experiment. Put validation checks on values entered by the user using JavaScript (such as age should be a value between 1 and 150).

- (b) Write a JavaScript program to display information box as soon as page loads.
- (c) Write a JavaScript program to change background color after 5 seconds of page load.
- (d) Write a JavaScript program to dynamically bold, italic and underline words and phrases based on user actions.
- (e) Write a JavaScript program to display a hidden div (e.g. showing stats of a player when user clicks on his name).

Experiment 5(Servlets)

- (a) create user registration web Application.
- (b) At the server end, write code to retrieve contents of request object and show them to the user. Match user input password with predefined password and show “Valid User” or “Invalid User” .
- (c) A web Application name as input and on submit it should show hello <name>. it show start time at the right top corner of the page and provide a logout button. On clicking logout button should goto logout page shows Thank you <name> with duration of usage.
- (d) A web application that takes name and age from html page. If age less than 18 it should show Hello <name> You are not authorized to visit the site. Otherwise welcome <name> to website.

Experiment 6 (JSP)

- (a) Create a simple JSP page, preferably for the form in experiment 3. Embed JSP in HTML page itself.
- (b) Separate the JSP and HTML coding in different files and link them together. Add data to request object
- (c) At the server end, write code to retrieve contents of request object and show them to the user. Match user input password with predefined password and show “Valid User” or “Invalid User” .
- (d) Modify the above program use XML file instead of database.
- (e) Modify the above program to use AJAX to show the result on same page.

Experiment 7 (JSP & DOM)

- (a) A web Application name as input and on submit it should show hello <name>. it show start time at the right top corner of the page and provide a logout button. On clicking logout button should goto logout page shows Thank you <name> with duration of usage.
- (b) A web application that takes name and age from html page. If age less than 18 it should show Hello <name> You are not authorized to visit the site. Otherwise welcome <name> to website.

- (c) create XML Document that contain 10 users information write a java program userId as input and returns user details from XML file by using DOM Parser.
- (d) create XML Document that contain 10 users information write a java program userId as input and returns user details from XML file by using SAX Parser.

Experiment 8

- (a) (A)Using ideas from above Experiments create a web site of our college RGUKT Basar.