WT Lab Syllabus

HTML

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 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.

CSS

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 inline 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

Java Script

Experiment 4. Write an HTML page including javascript that takes a given set of integer numbers and shows them after sorting in descending order.

Experiment 5. Write an HTML page including any required Javascript that takes a number from one text field in the range of 0 to 999 and shows it in another text field in words. If the number is out of range, it should show "out of range" and if it is not a number, it should show "not a number" message in the result box.

Experiment 6. Write an HTML page that has one input, which can take multi-line text and a submit button. Once the user clicks the submit button, it should show the number of characters, words and lines in the text entered using an alert message. Words are separated with white space and lines are separated with new line character.

Experiment 7. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

Implement the following web applications using (a) PHP, (b) Servlets and (c) JSP:

Experiment 8. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.

Experiment 9. Modify the above program to use an xml file instead of database.

Experiment 10. Modify the above program to use AJAX to show the result on the same page below the submit button.

Experiment 11. A simple calculator web application that takes two numbers and an operator (+, -, /, * and %) from an HTML page and returns the result page with the operation performed on the operands.

Experiment 12. Modify the above program such that it stores each query in a database and checks the
database first for the result. If the query is already available in the DB, it returns the value that was previously computed (from DB) or it computes the result and returns it after storing the new query and result in DB.

Experiment 13. A web application takes a name as input and on submit it shows a hello <name> page where <name> is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You <name> message with the duration of usage (hint: Use session to store name and time).

Experiment 14. A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “Hello <name>, you are not authorized to visit this site” message, where <name> should be replaced with the entered name. Otherwise it should send “Welcome <name> to this site” message.

Experiment 15. A web application for implementation:
The user is first served a login page which takes user's name and password. After submitting the details the server checks these values against the data from a database and takes the following decisions. If name and password matches, serves a welcome page with user's full name.

If name matches and password doesn't match, then serves “password mismatch” page
If name is not found in the database, serves a registration page, where user’s full name is asked and on submitting the full name, it stores, the login name, password and full name in the database (hint: use session for storing the submitted login name and password)

Experiment 16. A web application that lists all cookies stored in the browser on clicking “List Cookies” button. Add cookies if necessary.