

National Institute of Technology, Tiruchirappalli - 15.
Department of Computer Science and Engineering

LIST OF EXPERIMENTS

SUBJECT CODE : CS415

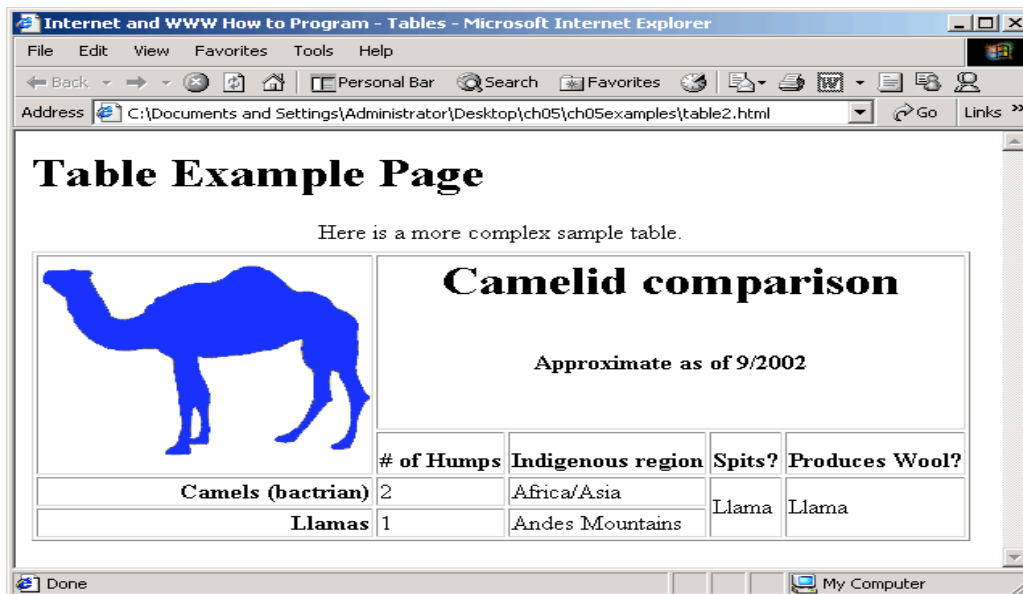
SUBJECT NAME : WEB TECHNOLOGY LAB

DEGREE : B.Tech (CSE)

YEAR / SEMESTER : IV / VII

Ex.No.1: Creation of Static web pages using HTML

1.a. Design the following web page using HTML.



1.b. Design a web page using HTML to display your profile. Use your digital image as a link. When the image link is clicked, a new page opens with the following links.

- Academic profile
- List of Mini Projects done
- Personal Profile

In each of the above links, provide a link “HOME” that will return to your first page.

1.c. Design the following web page using the concept of navigation frames.

<p>MENU</p> <ul style="list-style-type: none"> • <u>Rose</u> • <u>Jasmine</u> • <u>Lotus</u> 	<p>Click on the choice of your favorite flower links in the left frame</p> <p>in order to view the details of your favorite flower in the right frame.</p>
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1.d. Design the following web page using HTML to demonstrate the concept of nested lists.

- Coffee
- Tea
 - Black Tea
 - Green Tea
 - China
 - Africa
- Milk

1.e. Design a web page using HTML with the following.

- To embed an image map in a web page
 - To fix the hot spots in that map
 - Show all the related information when the hot spots are clicked.
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Ex.No.2: Creation of web pages using Cascading Style Sheets (CSS)

2.a. Design the following web page using XHTML with conflicting styles.

The Left margin for unordered list elements is set as 75 pixels and for nested list elements, it is set as 15 pixels whose text is underlined. The emphasized text is bold whose color is red. Initially, the text format for the link text is none. When the mouse is placed over the link, the text is underlined whose color changes to red and the background color is set to “aqua”.

Shopping list for *Monday*:

- Milk
- Bread
 - White bread
 - Rye bread
 - Whole wheat bread
- Rice
- Potatoes
- Pizza *with mushrooms*

[Go to the Grocery store](#)

2.b. Design the web page with the CSS styles as in Ex.2 using XHTML. The styles (CSS rules) are coded in a separate document(style.css). Link the external CSS file to the corresponding XHTML file. Also validate the CSS file using W3C CSS validation service.

2.c. Design a web page that contains the following paragraph.

Thanks for visiting my web site. I hope you enjoy a lot.

Please Note: This site will be moving soon. Check periodically for updates.

Write a separate User Style Sheet with the following styles. The body text is formatted as follows:

font-size: 20pt; color: yellow; background-color: blue

Set this user style sheet in your browser’s options and apply it to the XHTML file containing the above paragraph.

2.d. Write an XHTML document that shows the results of a color survey. The document should contain a form with radio buttons that allows users to vote for their favorite color. One of the colors should be selected as a default. The document should also contain a

table showing various colors and the corresponding percentage of votes for each color. Each row should be displayed in the color to which it is referring. Use inline style sheets for formatting.

2.e.(i)

Write a CSS rule that gives all **h1** and **h2** elements a padding of 0.5 **ems**, a **grooved** border style and a margin of 0.5 **ems**.

(ii)

Write a CSS rule that changes the color of all elements containing attribute **class = "greenMove"** to green and shifts them down 25 pixels and right 15 pixels.

Ex.No.3: Programs using Java Script

3.a. Write a Java script program to solve Towers of Hanoi problem. Enter the number of disks in a text field. In a text area, the program should display the precised instructions it will take to move the disk to starting peg to the destination peg.

3.b. Write a function perfect that determines whether the parameter number say NUM is a perfect number or Not. Use this function in a Java Script that determines and displays all the perfect numbers between 1 and 500.

3.c. Write a Java script program to check whether a given number is Palindrome or Not.

3.d. A company pays salaries for its sales people on a commission basis. The sales people receives \$200 per week + 9% of their gross sales. Write a Java script that obtains the gross sales for each employee through an HTML form and determine how many of the sales people earned salaries in each of thefollowing ranges.

\$ 200 to \$ 399

\$ 400 to \$ 699

\$ 700 to \$ 999

3.e. Write a Java script to perform Selection Sort for a given set of N numbers.

Ex.No.4: Programs using VB Script

4.a. Write a VB script program to compute the compound interest. Get the three input values P, N and R from the user through HTML form. Validate user entry such that it should not be blank and should contain only numbers.

- 4.b. Write a VB script program that inputs text from a HTML form and outputs the text in uppercase and lowercase letters.
- 4.c. Write a VB script program that inputs a line of text. Tokenize the line and output the tokens in reverse order in a text area.
- 4.d. Write a VB script program to perform Linear Search. Get the search key from the user through HTML form. Validate user entry such that it should not be blank and should contain only numbers.
- 4.e. Write a VB script application that allows a user to select his/her favorite site for browsing from a list of sites through a HTML form using Event Handler.
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Ex.No.5: Creation of Dynamic web pages using DHTML

- 5.a. Write a DHTML code to bounce the image randomly on the page.
- 5.b. Write a DHTML code using VB script to design a Calculator application that perform arithmetic operations like addition, subtraction, multiplication, division, modulo as well as scientific operations like Sin, Cos, Log,etc...
- 5.c. Design a form to get the following Customer personal details for an on-line application.

Name
Age
Address
Sex
Hobbies
Phone Number
E-mail ID

Write a DHTML code using VB script to validate the form elements as per the following rules.

- Name : should not be blank and contain only letters
- Age : should not be blank and contain only numbers between 1 to 100
- Phone No : should not be blank and contain only numbers. 3 or 4 digit STD code followed by a space and 6 Or 8 digit phone number.
- Email ID : should not be blank and contain only letters. Special characters allowed are . and @. Format should be ***Username@Domainname***

5.d. Write a DHTML code using Java script to display a message box containing the message WELCOME. When the OK button is clicked, the message WELCOME changes to THANKS.

Ex.No.6: Chat Applications using Socket Programming in Java

6.a. Write an application program in Java to implement the Two-Way Chatting between a Client and a Server using TCP / IP Sockets.

6.b. Write an application program in Java to implement the Two-Way Chatting between a Client and a Server using UDP Datagram Sockets.

Ex.No.7: Event Driven Programs using the concept of Applets in Java

7.a. Write an event driven program using Java Applets to perform the following Graphical Operations.

- i. To display a String at the specified location
- ii. To draw a line
- iii. To draw a hollow circle and a filled circle
- iv. To draw a hollow ellipse and a filled ellipse
- v. To draw a hollow rectangle and a filled rectangle
- vi. To draw various arcs(both normal and filled) each having different sweep angles
- vii. To draw a Polygon

7.b. Write an event driven program using Java Applets to display the names of all the available font families.

7.c. Write an event driven program using Java Applets to display some message in the status bar of Applet window. Also set the background color to CYAN and foreground color to RED.

7.d. Write an event driven program using Java Applets to display the URLs of the Class File and the Applet Code.

7.e. Write an event driven program using Java Applets to display a HTML file using Applet Context Interface.

Ex.No.8: Programs using AWT Controls and Layouts in Java

8.a. Write an event handler using Java AWT that contains two buttons labeled “YES” and “NO”. Each time one button is pressed, a message is displayed that reports which button has been pressed.

8.b. Write an event handler using Java AWT that contains four check boxes labeled “WINDOWS 98”, “WINDOWS NT”, “SOLARIS”, and “MACOS”. The initial state of the first check box is checked. The status of each check box is displayed. Each time you change the state of a check box, the status display is updated.

8.c. Write an event handler using Java AWT that contains three radio buttons labeled “DOT MATRIX PRINTER”, “LASER PRINTER”, and “COLOR PRINTER”. The initial state of the first radio button is checked, whose status is displayed. Each time you change the state of a radio button, the status display is updated.

8.d. Write an event handler using Java AWT that contains two lists. One selects the Operating System among the list items – WINDOWS 98, WINDOWS NT, LINUX, SOLARIS and MAC OS. The other selects the Browser among the list items – INTERNET EXPLORER, NETSCAPE NAVIGATOR, LYNX, FIRE FOX and OPERA. Each time, the list item that you select from each list is displayed.

8.e. Write an event handler using Java AWT to create a 4 X 4 grid using Grid Layout and fills it in with 16 buttons, each labeled with its index (i.e., labeled from 1 to 16). Each time one button is pressed, a message is displayed that reports which button has been pressed.

Ex.No.9: Programs using Java Servlets

9.a. Write a Generic Servlet Program to display the message “HELLO WORLD” in the Servlet Window.

9.b. Design an HTML Form that consists of the following fields and a SUBMIT button.

Employee Name

Employee ID

Department

Designation

Salary

Write a Generic Servlet Program to retrieve all the Form Parameter Names and their corresponding values using Http POST method and display them in the Servlet Window.

9.c. Design an HTML form that consists of a Combo Box with the following Options and a SUBMIT button.

Red

Green

Blue

Write a Servlet Program that extends Http Servlet to retrieve the selected Option value using doGet() method and display that selected option value in the Servlet window.

9.d. Design an HTML Form that consists of the following fields and a SUBMIT button.

Cookie Name

Cookie Value

Write a Servlet Program that extends Http Servlet to retrieve the Cookie Name along with its associated Value and add them on to the Client machine. Also Write a Servlet Program that extends Http Servlet to display all the Cookie details stored on the Client machine.

9.e. Write a Servlet Program that extends Http Servlet to display the current date and time information for the first request. On subsequent invocations, the Servlet must display the date and time of Last Access along with current date and time.

Ex.No.10: Programs using Java Server Pages (JSP)

10.a. Write a simple Server application using JSP to display the message “HELLO WORLD” in the Browser Window.

10.b. Write a Server application using JSP that uses the JSP’s implicit object – **request** to get the parameter’s value using GET method and display it in the Browser Window.

10.c. Write a Server application using JSP that uses the JSP’s implicit object – **session** to find the number of times a particular site has been visited.

10.d. Write a Server application using JSP that uses the JSP’s implicit object – **application** to load the properties on to the application. Also retrieve those properties from that application and display them in the Browser Window.

10.e. Design an HTML Form that consists of the following fields and a SUBMIT button.

Employee Name

Employee ID

Department

Designation

Salary

Write a Server application using JSP to retrieve all the Form Parameter Values using POST method and display them in the Browser Window.
