Vidyavardhaka College of Engineering

Gokulam III stage, Mysuru – 570 002
Department of Computer Science & Engineering
Autonomous Institute under Visvesvaraya Technological University (VTU)
Accredited by NBA (2020- 2023) & NAAC with 'A' Grade (2018 - 2023)

Semester – IV			
Course Name	: Web Technologies Laboratory	**Course Code :**	20CS48
No. of Lecture Hours / Week	: 00	**CIE Marks :**	50
No. of Tutorial / Practical Hours / Week	: 02	**SEE Marks :**	50
Total No. of Lecture + Tutorial / Practical Hours	: 00/02	**SEE Duration :**	03 Hrs.
L:T:P	: 1:0:2	**Credits :**	02

Course Overview

The laboratory course aims to introduce students to basics of HTML, CSS to design visually appealing web pages. Learn about Javascript to perform operations using functions and to write programs using XML and AJAX integrated with PHP.

Course Learning Objectives (CLO)

- Various static, dynamic web pages using HTML, CSS and Javascript.
- Client and server communication using AJAX.
- Design a web page using custom tags.

PART – A

1. Design, develop and implement HTML programs for the following:
   a. VIBGYOR
   b. Chess Board
2. 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 in the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).
3. 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.
4. Write an HTML page including JavaScript that takes a given set of integer numbers and shows them after sorting in descending order.
5. Develop and demonstrate, using JavaScript, a HTML that changes the content of HTML elements by assisting a user filling out a form associated with the text area, called a help box. The content of the help box can change, depending on the placement of the mouse cursor. When a cursor is placed over the input field, the help box can display advice on how the field is to be filled.

Vidyavardhaka College of Engineering

Gokulam III stage, Mysuru – 570 002
Department of Computer Science & Engineering
Autonomous Institute under Visvesvaraya Technological University (VTU)
Accredited by NBA (2020- 2023) & NAAC with 'A' Grade (2018 - 2023)

6. Design and develop a program to create a countdown timer with JavaScript.
7. Design an XML document to store information about a student in an engineering college affiliated to VTU. The information must include USN, Name, and Name of the College, Branch, Year of Joining, and email id. Makeup sample data for 3 students. Create a CSS style sheet and use it to display the document.
8. Write an XML file which will display the Book information which includes the following: a) Title of the book b) Author Name c) ISBN number d) Publisher name e) Edition f) 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 GRAY & 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.
9. Design an Ajax program to demonstrate how a web page can communicate with a web server while a user type characters in an input field.
10. Design a login page which takes input as username and password, on submit return true if both the input fields contain values else returns false.

PART – B

Open Ended Enquiry Problems
Students have to solve a problem*(either given by the staff or student may come up with their own problem) using the design techniques such as
1. Sports club website.
2. Javascript Music Player.
3. Dynamic Web Page.
4. Hospital Management System.
5. Online Shopping Webpage.

COURSE OUTCOMES (COs)	
At the end of the course, students will be able to	
CO1	Explain the usage of HTML syntax using basic tags and advanced tags
CO2	Implement the solution to a given problem using AJAX and PHP.
CO3	Design and Develop web pages.