

Web Technology Lab

Academic Year	2023-24	L: T: P: S:	0:0:2:0
Course Title	Web Technology Lab	Course code	22CSL35
Credit Units	01	Course Type	PCCL Lab Course
Exam Hours	3 hrs	CIE Marks	50
Total Hours:	24 hrs	SEE Marks	50

Course objectives:

1. To understand the various elements of a web page
2. To apply Javascript in creating dynamic interactive web pages.
3. To analyze various elements of ReactJS to design user interface.
4. To track and maintain user information among web pages.

Course Outcomes [CO]: At the end of the course, student will be able to:

CO1	Identify web page elements and attributes using HTML and CSS
CO2	Demonstrate reusable multiple components in web pages using ReactJS
CO3	Apply DOM concepts in creating dynamic web pages using JavaScript
CO4	Implement session management using PHP scripts
CO5	Design and develop dynamic and responsive web pages

S.No	Experiment	Hours	COs
1.	a) Write an HTML code to display your education details in a tabular format. b) Write an HTML code to create a Registration Form	2	CO1
2.	a) Develop and demonstrate the usage of inline, internal and external style sheet using CSS. b) Write an HTML code to display short profile card applying proper CSS style.	2	CO1
3.	a) Develop and demonstrate the usage of dynamic changes of CSS. b) Write an HTML page that reads name and USN from the form and displays it 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).	2	CO1 CO3
4.	Develop a Progressive Web Application (PWA) using HTML, CSS and JavaScript.	2	CO3 CO5
5.	Develop a simple task tracker application from scratch by making use of react.js.	2	CO2 CO5
6.	Develop a WebRTC (Web Real-Time Communication) platform for a video calling website using HTML and CSS.	2	CO2 CO4
7.	a) Write a HTML page that uses JavaScript to display a message when the mouse button is pressed and hide it once it is lifted. b) Write a JavaScript code that displays text “text-growing” with increasing font size	2	CO3 CO5

	in the interval of 100ms in red color, when the font size reaches 50pt it displays “text-shrinking” in blue color. then the font size decreases to 5pt		
8.	Write a program using PHP and HTML to create a form and display the details entered by the user.	2	CO4
9.	a) Write a PHP program to display a chess board. b) Write a PHP program to store page views count in SESSION, to increment the count on each refresh, and to show the count on web page. c) Write a PHP program to store current date-time in a COOKIE and display the ‘Last visited on’ date-time on the web page upon reopening of the same page.	2	CO4 CO5
10.	Implement the web application with NoSQL Database and PHP.	2	CO5

Text Books:

Sl.#	Author & Edition	Publisher
7.	Robert W Sebesta, “Programming the World Wide Web”, 6th Edition, 2008	Pearson Education
8.	Learning React, 2e: Modern Patterns for Developing React Apps 2 nd Edition, 2020	O'Reilly

Reference Books:

Sl.#	Author & Edition	Publisher
1.	HTML & XHTML: The Complete Reference, Thomas A. Powell, , Fourth Edition, 2008	Tata McGraw Hill
2.	Chris Bates, “Web Programming Building Internet Applications”, 3rd Edition, 2006.	Wiley India
3.	MongoDB: The Definitive Guide: Powerful and Scalable Data Storage 3rd Edition, 2019	O'Reilly Media

E-Learning:

1.	Full JavaScript Masterclass Course - Infosys SpringBoard
2.	React JS – Infosys SpringBoard

Self-Study Component:

Sl No	Topic	Reference Links
1.	Event propagation	https://www.youtube.com/watch?v=BtOrr7oTH_8&ab_channel=ZacGordon
2.	Frames	https://www.youtube.com/watch?v=rvRwahMbg5g&ab_channel=KailashJoshiTutorials
3.	Mouse / Cursor position	https://www.youtube.com/watch?v=IMV-hf4JIK0&ab_channel=OnlineTutorials
4.	NoSQL	https://www.youtube.com/watch?v=0buKQHokLK8&ab_channel=SimplyExplained
5	MongoDB	https://www.youtube.com/watch?v=c2M-rlkkT5o&ab_channel=BroCode