Lab Code	Lab Name	Credit
ADL501	**Web Development Lab**	**1**

Prerequisite: Operating System, Basics of Java and Python Programming.
Lab Objectives:

1	To orient students to HTML for making webpages
2	To expose students to CSS for formatting web pages
3	To expose students to developing responsive layout
4	To expose students to JavaScript to make web pages interactive
5	To orient students to React for developing front end applications
6	To orient students to Node.js for developing backend applications

Lab Outcomes:

1	Identify and apply the appropriate HTML tags to develop a webpage
2	Identify and apply the appropriate CSS tags to format data on webpage
3	Construct responsive websites using Bootstrap
4	Use JavaScript to develop interactive web pages.
5	Construct front end applications using React and back end using Node.js/express

Suggested Experiments: Students are required to complete at least 10 experiments.
Star (*) marked experiments are compulsory.

Sr. No.	Name of the Experiment
1	HTML:Elements, Attributes, Head, Body, Hyperlink, Formatting, Images, Tables, List, Frames, Forms, Multimedia
2	CSS3.Syntax, Inclusion, Color, Background, Fonts, Tables, lists,CSS3 selectors, Pseudo classes, Pseudo elements .
3	Bootstrap:BootstrapGrid system, Forms, Button, Navbar, Breadcrumb, Jumbotron
4	Javascript:Variables, Operators, Conditions, Loops,
5	Java Script : FunctionsValidations, Arrays, String, Date
6	Java Script :Events, Classes and Objects, Error handling,
7	React:Installation and Configuration. JSX, Components, Props, State, Forms, Events, Routers, Refs, Keys.
8	Advance React: Concepts and Practical.

Useful Links:	
1	www.leetcode.com
2	www.hackerrank.com
3	www.cs.usfca.edu/~galles/visualization/Algorithms.html
4	www.codechef.com

Term Work:	
1	Term work should consist of 8(min) to 12(max) experiments.
2	The final certification and acceptance of term work ensures satisfactory performance of laboratory work and minimum passing marks in term work.
3	Total 25 Marks based on evaluation of Experiments.
Evaluation exam	
	Practical Exam based on lab syllabus of ADL501