CAP757:WEB TECHNOLOGIES-LABORATORY

L:0   T:0   P:2   Credits:1

Course Outcomes: Through this course students should be able to

CO1 :: recognize the latest DHTML and CSS concepts

CO2 :: understand bootstrap concepts for responsive web designing

CO3 :: apply the dynamic web design concepts using react js

CO4 :: construct interactive interfaces using react components

List of Practicals / Experiments:

Overview of HTML
- structure of HTML page
- working with tags and attributes
- working with list and inline elements
- implementing tables and forms

DHTML with CSS
- concepts of selectors
- formatting tags with css
- responsive layout designing using css flexbox

Interface designing with BootStrap
- introduction to bootstrap
- associating bootstrap with mobile web interfaces
- bootstrap modals and cards
- bootstrap carousel and css z-index

Introduction to ReactJS
- reactjs architecture
- reactjs and web development

Pure React concepts
- setting up webpage using react and react dom
- constructing elements with data
- concept of dom rendering
- working with factories in react

Using React with JSX
- defining react elements using jsx
- concept of transpiling and babel
- working with recipes and webpack

State management and component tree in ReactJS
- validating properties with react
- managing data using state in react
- using component tree to manage state

Working with React router and server

- web page management by incorporating react router

- data driven web applications and router parameters

- react based server rendering

- react based server communication

Functional programming with Javascript

- programming constructs in javascript

- introduction to es6 class

- components of es6 class

Text Books:

1. HTML & CSS: THE COMPLETE REFERENCE by THOMAS A. POWELL, M.G.Hills

2. LEARNING REACT: MODERN PATTERNS FOR DEVELOPING REACT APPS by ALEX BANKS, EVE PORCELLO, O'REILLY

References:

1. WEB ENABLED COMMERCIAL APPLICATION DEVELOPMENT USING HTML, JAVASCRIPT, DHTML AND PHP by IVAN BAYROSS, BPB PUBLICATIONS

2. ADVANCED WEB DEVELOPMENT WITH REACT: SSR AND PWA WITH NEXT.JS USING REACT WITH ADVANCED CONCEPTS: SSR AND PWA WITH NEXT.JS USING REACT WITH ADVANCED CONCEPTS by MEHUL MOHAN, BPB PUBLICATIONS

3. LEARNING REACT NATIVE: BUILDING NATIVE MOBILE APPS WITH JAVASCRIPT by BONNIE EISENMAN, O'REILLY