* + **ReactJS**
  + **MODULE: 3 (JavaScript Essentials)**

1)What is React Js?

* + Ans:A Javascript Library for Creating User Interface,
  + It is use for building interactive user interfaces and web Applications quickly with less code than Vanilla JS.

1. What is NPM in React Js?
   * Ans:NPM Stands For Node Package Manager.
   * It Is Package manager for Javascript.
   * It is a default package manager that comes with javascript when you install it.
2. What is Role of Node Js in react Js?
   * Node JS is a framework for Javascript which is mainly used for working with backend of our application,or building backend using javascript.
   * Using Node Js with React can help in handling requests and maintaining server load balance.
3. What is CLI command In React Js?
   * Creating New application:create-react-app provides creating multiple way to create React Application
   * Selecting a template :create-react-app creates react application using default template.
   * Installing Dependancy
   * Running Application
4. What is Components in React Js?
   * Components are independent and reusable bits of code
   * They serve same purpose as javascript function but work in isolation and returns HTML

6) What is Header and Content Components in React Js?

* + Headers are **compositions that extend standard navbar functionalities**.
  + They contain additional components like a jumbotron, sub-navbar, or image covers which serve as a containers for extra navigation elements - usually links, forms, or call-to-action buttons.

7) How to install React Js on Windows, Linux Operating System? How to install NPM and How

* + to check version of NPM ?
  + Before installing react we need to install NodeJs,NodeJS is a dependency manager that provide dependency,for downloading NodeJS go to the NodeJS official website and download latest version of node js from there.Install NodeJScheck nodeJS vesion to ensure proper installation by node -v command on command prompt.
  + NodeJS contains npm so with NodeJS installation npm has been installed too.
  + **Install ReactJS in window**
  + npm install -g create-react-app

8) How to check version of React Js?

* + To check version of react hit command
  + Create-react-app –version.

9) How to change in components of React Js?

* + We Can make changes in components of react using props and states. **Props are used to pass data, whereas state is for managing data**. Data from props is read-only, and cannot be modified by a component that is receiving it from outside. State data can be modified by its own component, but is private (cannot be accessed from outside)
  + 10) How to Create a List View in React Js?
  + import React from 'react'
  + function List() {
  + const list=[{id:1,item:"Books"},
  + {id:2,item:"Laptop"},
  + {id:3,item:"Charger"},
  + {id:4,item:"Mobile"}]
  + return (
  + <div>
  + <ul>
  + {list.map((elem)=>{
  + return<li>Item is {elem.item}</li>
  + })}
  + </ul>
  + </div>
  + )
  + }
  + export default List
  + o/p :

1. Item is Books
2. Item is Laptop
3. Item is Charger
4. Item is Mobile

11) Create Increment decrement state change by button click?

* + import React,{useState} from 'react'
  + import './Incr\_Decr.css'
  + function Increment\_decrement() {
  + const [number, setNumber] = useState(0);
  + const Increment=()=>{
  + setNumber(number+1);
  + }
  + const Decrement=()=>{
  + setNumber(number-1);
  + }
  + const Reset=()=>{
  + setNumber(0);
  + }
  + return (
  + <div className='form'>
  + <h1>React Web</h1>
  + <div className='number'>{number}</div>
  + <button onClick={Increment}>Increment</button>
  + <button onClick={Decrement}>Decrement</button>
  + <div><button onClick={Reset}>Reset</button></div>
  + </div>
  + )
  + }
  + export default Increment\_decrement