**Module – 3 ReactJs**

1. **What is React Js?**

* The React.js framework is an open-source JavaScript framework and library developed by Facebook. It’s used for building interactive user interfaces and web applications quickly and efficiently with significantly less code than you would with vanilla JavaScript.

1. **What is NPM in React Js?**

* NPM is short for node package manager, an online directory that contains the various already registered open-source packages. NPM modules consume the various functions as a third-party package when installed into an app using the NPM command npm install .

1. **What is Role of Node Js in react Js?**

* NodeJS is a framework of JavaScript which is mainly used for working with the backend of our application or building the backend using JavaScript, whereas ReactJS is a JavaScript front-end library. It is mainly used for building the user interface or the frontend of our application.

1. **What is CLI command In React Js?**

* React CLI (aka rct) helps you to automate the most obvious tasks which we as developers used to do manually such as creating a new component by making a separate folder & then making component's jsx or css files manually. rct helps you out with these kind of tasks by providing you simple to use command line tool.

1. **What is Components in React Js?**

* Components are independent and reusable bits of code. They serve the same purpose as JavaScript functions, but work in isolation and return HTML. Components come in two types, Class components and Function components, in this tutorial we will concentrate on Function components.

1. **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.

1. **How to install React Js on Windows, linux Operating System?**

* I) **Step 1**: Install Node.js installer for windows. Click on this [link](https://nodejs.org/en/). Here install the LTS version (the one present on the left). Once downloaded open NodeJS without disturbing other settings, click on the **Next**button until it’s completely installed.

ii) **Step 2**: Open command prompt  to check whether it is completely installed or not type the command –>

iii) Step 3: Now in the terminal run the below command:

npm install -g create-react-app

iv) **Step 4**: create-react-app reactfirst YOUR\_APP\_NAME

v) **Step 5**: Now open the IDE of your choice for eg.  Visual studio code and open the folder where you have installed the react app **newfolder**(in the above example) inside the folder you will see your app’s name **reactapp**(In our example). Use the terminal and move inside your app name folder.Use command **cd reactapp**(your app name)

vi) **Step 7:**To start your app run the below command :

npm start

1. **How to install NPM and How to check version of NPM?**

* All installed npm check packages may be seen using the npm list -g utility. a copy of a program that has been installed on a computer. To find out what version of a certain package you have installed, run npm list first.

1. **How to check version of React Js?**

* [React](https://www.geeksforgeeks.org/react-js-introduction-working/) is a Javascript front-end library that is used to build single-page applications (SPA). If we want to know which react version we are using to build a project then there are some easy ways to find it. In this article, we are going to discuss three ways to find out the React version.

1. **Using package.json file:-** The [package.json](https://www.geeksforgeeks.org/node-js-package-json/) contains metadata about our project. It is created by default when we create our React project. We can create a react app using the command mentioned below.

npx create-react-app name\_of\_the\_app

The package.json file contains a lot of information in the name/value pairs

in [JSON](https://www.geeksforgeeks.org/javascript-json/) format. We can easily check our React version under the list of

dependencies as shown in the image given below.

1. **Using command line:-** We can easily check the React version by using the command mentioned below on our command line.

npm view react version

The output demonstrating the use of the above command on the command

line is mentioned below.

1. **Using version property of default import from React:-** The default import from React library is an object that has version property on it. We can use this property inside our JSX elements in our desired manner.

import React from 'react';

let a = React.version

To follow along with the article create a react project using the command that

was discussed above in the article.

1. **How to change in components of React Js?**

* To change a value in the state object, use the this. setState() method. When a value in the state object changes, the component will re-render, meaning that the output will change according to the new value(s).

1. **How to Create a List View in React Js?**

* import React from 'react';

import ReactDOM from 'react-dom';

const myList = ['Peter', 'Sachin', 'Kevin', 'Dhoni', 'Alisa'];

const listItems = myList.map((myList)=>{return <li>{myList}</li>; });

ReactDOM.render ( <ul> {listItems} </ul>)