**ReactJs**

**MODULE:9 ReactJs Intro**

**• What is React Js?**

=>React is an a open –sourcce JavaScript library used for building user interfaces for web application.It was developed and is maintaines by Facebook for creact single-page application and is know for its component-based architecture and virtual DOM (Document Object Model)manipulation.

• **What is NPM in React Js?**

=>In ReactJs,npm stands for Node Package Manager.It is used to manage and install packages and dependencies for React Project.

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

**=>**Node.js plays a crucial role in React.js development as it allows us to run JavaScript code outside of a web browser.It provides a runtime environment for executing JavaScript on the server-side,which is essential for server-side rendering in ReactJs.

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

**=>**In ReactJs CLI stands for Command Line Interface.it provides a set of commands that you can run in your terminal to perform various tasks such as creating a new React project,starting a development server,building the project for production and more.

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

**=>**In ReactJs component are the building blocks of a user interface.They are reusable and self-contained pieces of code that encapsulate the functionality and appearance of a specific part of a web page.

* **What is Header and Content Components in React Js?**

**=>** In React.js, the Header and Content components are commonly used to structure the layout of a web page or application.

The Header component typically contains elements such as the site logo, navigation menu, and other header-related content. It provides a consistent and easily identifiable section at the top of the page.

* **How to install React Js on Windows, Linux Operating System? How to Install NPM and How to check version of NPM?**

**=>** To Install react.js requires Node.js to run. You can download and install Node.js from the official website.

=>Open a terminal or command prompt

=> Install create-react-app. This is a command-line tool that sets up a new React.js project with the necessary files and dependencies. Run thr following Command: npm install-g-create-react-app

=> Create a new project React.js Navigate to the directory where you want to create your project and run the following command: npx create-react-app my-app

=> Once the project is created, Navigate into the project directory: cd my-app

=> Start the development server: Run th following command to start the development server and open your react.js application in the browser: npm start

To install npm, you don’t need to do anything separately as it comes bundled with Node.js

To check the version of npm, you can run the following command in your terminal or command prompt: npm –v

This will display the installed version of npm.

Example: $npm –v

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

=>To check the version of React.js in your project, you can open the package.json file located in the root directory of your React.js project. Inside the package.json file, you will find a "react" dependency entry with its corresponding version number.

Here's an example of what the "dependencies" section in a package.json file might look like:

json

"dependencies": {

"react": "17.0.2",

"react-dom": "17.0.2"

}

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

=>

1. Locate the component you want to change: Components in React.js are typically stored in separate files with a .js extension. Find the file that contains the component you want to modify.

2. Open the component file: Use a code editor to open the component file. You can make changes to the component's code within this file.

3. Make your desired changes: Modify the component's code according to the changes you want to make. You can update the component's structure, add or remove elements, update styling, or modify the component's behavior.

4. Save the changes: After making the necessary modifications, save the component file.

5. Check the changes in your application: If you have your React.js application running in development mode (npm start), the changes should automatically be reflected in your application. If not, stop and restart the development server (npm start) to see the updated component.

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

**=>**Creact a list of elements in React in the form of an array and store it in a variable.

**=>**We will then traverse the list using the JavaScript map()

Function and updates elements to be enclosed between <li></li>elements.

Ex:-

import React from 'react';

import ReactDOM from 'react-dom';

const numbers = [1,2,3,4,5];

const updatedNums = numbers.map((number)=>

{

return <li>{number}</li>;

});

ReactDOM.render(

<ul>

{updatedNums}

</ul>,

document.getElementById('root')

);