

## Day 17 Revisit

Node – JSRE (Javascript Runtime Environment) – Open Source, v8 Engine based JSRE. (Event Driven & Async) [nodejs.org] – 20.9.0 LTS version

Node – It helps to utilise the power of JS (Make JS as a General purpose Lang)

Node contains many modules which contains classes and methods to do any type of work. (http, filesystem).

Node mainly focus on Non-blocking operation mode (Async)

With the help of nodejs, we can run the JS code outside the browser. From terminal or command prompt (demo)

Created simple server using nodejs http module.

NPM – Node Package Manager [Package manager /dependency managing tool for JS based application]

Similar to Maven for Java, NPM for JS based applications.

NPM init (tool) to create package.json file.

Types of dependency installation (Local & Global Installation)

Local – Specific to the particular project/ folder level (Current Folder)

Global – For the Entire System [default location is “user/<user\_name>/AppData/Roaming/npm”]

Npm install bootstrap (Local installation) [=== npm i bootstrap]

Npm install -g bootstrap (Global Installation) [=== npm i -g bootstrap]

React – It's JS Library (Open Source) developed by Facebook.

It helps to create component based UI.

React DOM (Virtual DOM vs Actual DOM)

SPA – Single Page Application (Index.html file)

Folder Structure of React Application [public,src, package.json, .gitignore, readme.md]

Public – index.html

Src – App.js (Root Component)

Exporting & Importing Module

Creating First React Component, Hello Component, HelloMessage Component [Demo]

Component – Reusable piece of UI Code.

Running the React app

Using few React based extensions in VS code. [JS Prettier, React Helper] (rcc,rhc)

React component returns a single element only.

Props – It's attributes collection of a react component. [this.props.name, this.props.message] – Inter component communication]

React Component – It's custom html tag.

React Tags should be properly closed.

State – It's a collection properties which can be changed with the help of setState() that re-render the Component.

Hot Reloading – Dynamic Rendering

#### Day 18 Agenda

- States and Properties
- Stateless Components
- Stateful Components
- Styling Approach in React
- Component Lifecycle Events
- Event Categories
- Event Definition
- Mounting and Unmounting Events
- Components and Props
- State and Lifecycle
- Handling Events
- HOC (Higher Order Components)

Life Cycle method – 3 Phase [Mounting, Updating, UnMounting]

Life Cycle Methods - componentDidMount, componentDidUpdate, componentWillUnmount

React encourages using functional component.