* What is React Js?

ReactJS is JavaScript library used for building reusable UI components. According to React official documentation, following is the definition

React is a library for building composable user interfaces. It encourages the creation of reusable UI components, which present data that changes over time. Lots of people use React as the V in MVC. React abstracts away the DOM from you, offering a simpler programming model and better performance. React can also render on the server using Node, and it can power native apps using React Native. React implements one-way reactive data flow, which reduces the boilerplate and is easier to reason about than traditional data binding.

* What is NPM in React Js?

NPM is an abbreviation used for the node package manager.

It is a package manager for JavaScript. It is the default package manager that comes with NodeJS when you install it. It consists of a command-line interface and an online database of public packages and private packages that are paid which is called the NPM Registry.

* What is Role of Node Js in react Js?

Node.js developers deploy and maintain network applications. They manage the exchange of data between servers and users, develop back-end components, and connect applications with other web services. They also support front-end developers by integrating web-based applications.

* What is CLI command in React Js?

React have its own CLI but currently they are only supporting creating an app (create-react-app). create-react-app used to generate the boilerplate version of a React application thru command line.

npx create-react-app my-app

create-react-app has taken care of setting up the main structure of the application as well as a couple of developer settings. Most of what you see will not be visible to the visitor of your web app. React uses a tool called webpack which transforms the directories and files here into static assets. Visitors to your site are served those static assets.

* What is Components in React Js?

The core ecosystem of JavaScript consists of 3 main components which are ECMAScript, JavaScript Engine, and the JavaScript Runtime. NodeJS and Google Chrome can use the same JavaScript Engine and yet have very different implementations of JavaScript for developers.

* 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-near, or image covers which serve as a container for extra navigation elements - usually links, forms, or call-to-action buttons.

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

Step -1 Install Node.js installer for windows. Click on this link. 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.

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

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

npm install -g create-react-app

Step 4: Now Create a new folder where you want to make you react app using the below command:

mkdir newfolder

Step 5: Now inside this folder run the command –>

create-react-app reactfirst YOUR\_APP\_NAME

Step 6: 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)

Step 7: To start your app run the below command:

npm start

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

The version of npm packages installed on your computer can be found by running the npm list command. First, navigate to the root directory of your project, then run the npm list command. The output above shows the packages installed in the node modules/ folder.

* How to check version of React Js?

To check which React version is your project using you need to open the package. json. Take a look under the dependencies section. It should list all of the dependencies of your project and one of those should be React.

* How to change in components of React Js?

To change the state of the React component is useful when you are working on a single page application, it simply replaces the content of the existing component for the user without reloading the webpage.

We have to set initial state value inside constructor function and set click event handler of the element upon which click, results in changing state. Then pass the function to the click handler and change the state of the component inside the function using setState. The setState function used to change the state of the component directly or with the callback approach as mentioned below.

Syntax:

this.setState({ stateName : new-state-value})

this.setState(st => {

st.stateName = new-state-value

})

* How to Create a List View in React Js?

import React, { Component } from 'react'

import { Text, ListView, StyleSheet } from 'react-native'

export default class MyListComponent extends Component {

constructor() {

super();

const ds = new ListView.DataSource({rowHasChanged: (r1, r2) => r1 !== r2});

this.state = {

dataSource: ds.cloneWithRows(['Android','iOS', 'Java','Php', 'Hadoop',

'Sap', 'Python','Ajax', 'C++',

'Ruby', 'Rails','.Net', 'Perl']),

};

}

render() {

return (

<ListView

dataSource={this.state.dataSource}

renderRow={

(rowData) =>

<Text style={{fontSize: 20}}>{rowData}</Text>}

/>

);

}

}

* Create Increment decrement state change by button click?

import React, { Component } from 'react';

class App extends Component {

constructor(props) {

super(props);

this.state = {

clicks: 0,

show: true

};

}

IncrementItem = () => {

this.setState({ clicks: this.state.clicks + 1 });

}

DecreaseItem = () => {

this.setState({ clicks: this.state.clicks - 1 });

}

ToggleClick = () => {

this.setState({ show: !this.state.show });

}

render() {

return (

<div>

<button onClick={this.IncrementItem}>Click to increment by 1</button>

<button onClick={this.DecreaseItem}>Click to decrease by 1</button>

<button onClick={this.ToggleClick}>

{ this.state.show ? 'Hide number' : 'Show number' }

</button>

{ this.state.show ? <h2>{ this.state.clicks }</h2> : '' }

</div>

);

}

}