React JS Training

(Intermediate to Advanced)



Narasimha

Trainer Introduction



Narasimha

Trainer Introduction

- 20+ Years of Experience
- Educational Background : MCA
- Experience with Software Development and Training on different technologies.
- As SDET2: VS 2008, IE8, Bing, MS Dynamics
- MCTS certified
- Key Skills: UI Technologies, MEAN/MERN, DotNet Fullstack
- Given valued added trainings for corporate clients.
- Recent Clients: Ness Tech, Prolifics, Deloitte, Salesforece, Cognizant, Godrej, Pega Systems, FIS Global, Aptean etc..

Training Schedule



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Schedule for React JS Training

Day#	Date	Topic
Day-1	16-Apr-2024	State Management : Class Components
Day-2	17-Apr-2024	State Management : Functional Components, Hooks
Day-3	18-Apr-2024	Http Client Programming – AJAX Calls to APIs (Node JS)
Day-4	19-Apr-2024	Working with Forms, Validations, Services
Day-5	22-Apr-2024	Redux – State Management Library
Day-6	23-Apr-2024	Unit Testing React Application
Day-7	24-Apr-2024	Routing – SPA in React JS

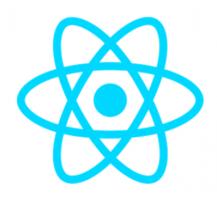
Day1 State Management in React JS



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Index – Day1

- 1. Recap: React JS Basics
- 2. State and Props in React Components
- 3. State management API: setState()
- 4. How to manage state in class components
- 5. Stateless component



React Components: Stateful / Stateless

Stateful Components

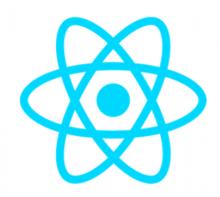
- Stateful / Container / Smart
- That means the stateful components are keeping track of changing data.
- Class based components are stateful

Stateless Components

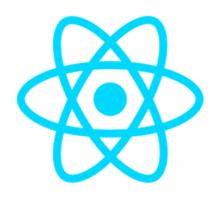
- Stateless / presentational / dumb
- Concerned with presenting data how things look
- Usually are STATELESS but not always
- Most likely a 'child' of a container component
- Will make up the majority of your application

Components

- Class Components (stateful)
- Functional Components without hooks (stateless)
- Functional Components with hooks (stateful)



State and Props in React Components



Working with Props

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Working with props

- "Props" is a special keyword in React
- It stands for properties
- It used for passing data from one component to another.
- props are used like attributes in html tags.
- props data is read-only, which means that data coming from the parent should not be changed by child components.

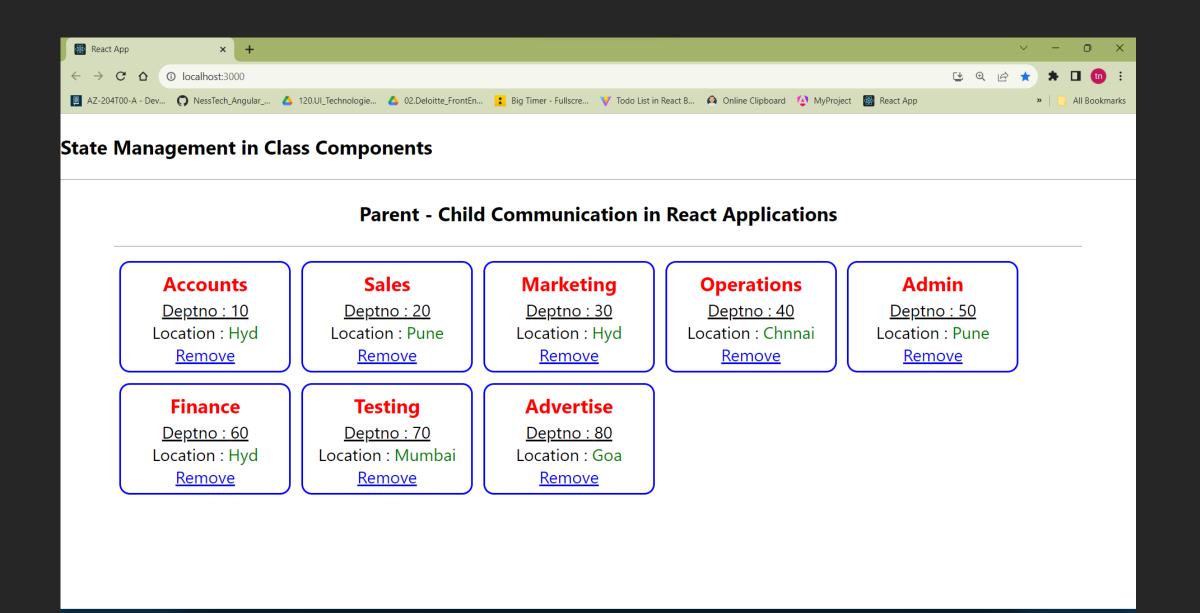
Working with props

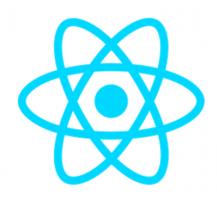
```
<Demo uname="Narasimha" />

<div>
    Welcome to {this.props.uname}
</div>
```

Practice Hands-Ons

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How to manage the state?

Working with state in Class Components

- state is an instance member of React Component.
- It can be defined as an object of a set of properties.
- It holds the information that may change over the lifetime of the component.
- By default every component will get state object as null from parent component (React.Component).
- We initialize state in component constructor with required properties.

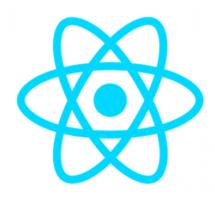
```
this.state = { uname : "Scott"};
```

Usage of setState() method

- setState() schedules an update to a component's state object.
- When state changes, the component responds by re-rendering.
- setState() is the only legitimate way to update state after the initial state setup.

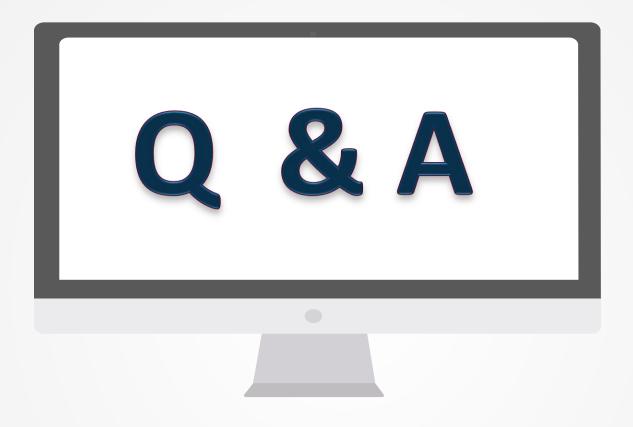
Usage of setState() method

```
class Demo extends React.Component
    constructor()
          this.state = { name : "Scott" }; // Initialize State
          this.buttonClick = this.buttonClick.bind(this);
   buttonClick() {
          this.setState( { name : "Scott" } ); // Update State
```



Stateless Components

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