

## CHAPTER 5

### STATE

#### 5.1 USING STATE IN CLASS COMPONENT :

React components has a built-in **state** object. The state object is where you store property values that belongs to the component. When the state object changes, the component re-renders.

The state object is initialized in the constructor:

Create dir : -> `/src/Components/Class/ClassState.js`

GitHub url : <https://github.com/ashok-FD/new-app/tree/State>

```
import React, { Component } from 'react'

class ClassState extends Component {
  constructor(props) {
    super(props);
    this.state = {
      value: "This is class state",
    };
  }

  render() {
    return (
      <div>
        <p style={{textDecoration:'underline'}}>ClassState</p>
        <p>{this.state.value}</p>
      </div>
    )
  }
}

export default ClassState
```

## 4.2 USING STATE IN FUNCTIONAL COMPONENTS :

Create dir : -> /src/Components/*Function*/FunctionState.js

```
import React, { useState } from 'react'

function FunctionState() {
  const [value, setValue] = useState("This is Function State")

  return (
    <div>
      <p style={{ textDecoration: 'underline' }}>FunctionState</p>
      <p>{value}</p>
    </div>
  )
}

export default FunctionState
```

Ref:

[https://www.w3schools.com/react/react\\_state.asp](https://www.w3schools.com/react/react_state.asp)

<https://reactjs.org/docs/state-and-lifecycle.html>

### 4.3 SETSTATE IN CLASS COMPONENT :

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

```
import React, { Component } from 'react'

class ClassState extends Component {
  constructor(props) {
    super(props);
    this.state = {
      value: "This is class state",
    };
    this.stateChange = this.stateChange.bind(this);
  }

  stateChange(){
    this.setState({value:`This is class state value: $
{Math.floor(Math.random()*100)} ` })
  }

  render() {
    return (
      <div>
        <p style={{textDecoration:'underline'}}>ClassState</p>
        <p>{this.state.value}</p>
        <button onClick={this.stateChange}>Change Class
State</button>
      </div>
    )
  }
}

export default ClassState
```

### 4.3 SETSTATE IN FUNCTIONAL COMPONENT :

```
import React, { useState } from 'react'

function FunctionState() {
  const [value, setValue] = useState("This is Function State")

  const stateChange = () => {
    setValue(`This is class state value: $
{Math.floor(Math.random()*100)}`);
  }

  return (
    <div>
      <p style={{ textDecoration: 'underline' }}>FunctionState</p>
      <p>{value}</p>
      <button onClick={stateChange}>Change Function
State</button>
    </div>
  )
}

export default FunctionState
```

### VSCODE VIEW ON GITHUB CLONE :

