1] Example

import React, { Component } from 'react';

class App extends Component {

constructor(props){

super(props);

this.state = {

data: 'Jordan Belfort'

}

}

componentWillMount(){

console.log('First this called');

}

getData(){

setTimeout(() => {

console.log('Our data is fetched');

this.setState({

data: 'Hello WallStreet'

})

}, 1000)

}

componentDidMount(){

this.getData();

}

render() {

return(

<div>

{this.state.data}

</div>

)

}

}

export default App;

2] Main.js

import React from 'react';

import ReactDOM from 'react-dom';

import App from './app/app.jsx';

ReactDOM.render(<App />, document.getElementById('App'));

import React from 'react';

class Person extends React.Component {

constructor(props) {

super(props);

this.state = { mode: undefined };

}

componentWillMount() {

var modeValue;

if (this.props.age > 70) {

modeValue = "old";

} else if (this.props.age < 18) {

modeValue = "young";

} else {

modeValue = "middle";

}

console.log(modeValue)

this.setState({ mode: modeValue });

}

render() {

return (

<div className={"person person-" + this.state.mode}>

{this.props.name} (age: {this.props.age})

</div>

);

}

}

Person.defaultProps = { age: "unknown" };

export default Person;

2] Main.js

import React from 'react';

import ReactDOM from 'react-dom';

import Person from './App.jsx';

// ReactDOM.render(<App/>, document.getElementById('app'))

ReactDOM.render(

<Person name="Donald Trump" age="72" />,

document.getElementById("person1")

);

ReactDOM.render(

<Person name="Ivanka Trump" age="36" />,

document.getElementById("person2")

);

3] index.html

<!DOCTYPE html>

<html lang = "en">

<head>

<meta charset = "UTF-8">

<title>React App</title>

</head>

<body>

welcome to react application

<div id="person1"></div>

<div id="person2"></div>

<script src = "index.js"></script>

</body>

</html>

Example 2

class NumberView extends React.Component {

  constructor(props) {

    super(props);

    this.state = {

      currentNumber: 1

    };

  }

  nextValue() {

    this.setState((prevState, props) => {

      return {

        currentNumber: prevState.currentNumber + 1

      };

    });

  }

  shouldComponentUpdate(props, nextState) {

    // Odd Number

    return nextState.currentNumber % 2 == 1;

  }

  render() {

    return (

      <div className="number-viewer">

        <button onClick={() => this.nextValue()}>Next Value</button>

        <p>Current Value: {this.state.currentNumber}</p>

      </div>

    );

  }

}

// Render

ReactDOM.render(<NumberView />, document.getElementById("numberview1"));

2] HTML PAGE

 <body>

      <h1>shouldComponentUpdate():</h1>

      <p>Show only odd numbers</p>

      <div id="numberview1"></div>

Example 3

class RevenueView extends React.Component {

  constructor(props) {

    super(props);

    this.state = {

      year: 2018,

      revenue: 1000,

      growthRate: "Unknown"

    };

  }

  nextYear() {

    this.setState((prevState, props) => {

      var randomRevenue = prevState.revenue \* (1 + Math.random());

      return {

        year: prevState.year + 1,

        revenue: randomRevenue

      };

    });

  }

  UNSAFE\_componentWillUpdate(props, nextState) {

    var rate = (nextState.revenue - this.state.revenue) / this.state.revenue;

    nextState.growthRate = 100 \* rate + " %";

  }

  render() {

    return (

      <div className="revenue-view">

        <p>Year: {this.state.year}</p>

        <p>Revenue: {this.state.revenue}</p>

        <p>Growth Rate: {this.state.growthRate}</p>

        <button onClick={() => this.nextYear()}>Next Year</button>

      </div>

    );

  }

}

// Render

ReactDOM.render(<RevenueView />, document.getElementById("revenueview1"));

HTML PAGE

style>

         .revenue-view  {

         border:1px solid #cbbfab;

         padding: 5px;

         margin: 5px;

         }

      </style>

   </head>

   <body>

      <h3>UNSAFE\_componentWillUpdate(props,nextState):</h3>

      <div id="revenueview1"></div>