React – Components,State,Props

**React.Component**

React lets you define components as classes or functions. Components defined as classes currently provide more features which are described in detail on this page. To define a React component class, you need to extend React.Component:

class Welcome extends React.Component {

render() {

return <h1>Hello, {this.props.name}</h1>;

}

}

The only method you must define in a React.Component subclass is called [render()](https://reactjs.org/docs/react-component.html#render). All the other methods described on this page are optional.

**React.State**

To define a state, you have to first declare a default set of values for defining the component's initial state. To do this, add a class constructor which assigns an initial state using this.state. The **'this.state'** property can be rendered inside **render()** method.

1. **import** React, { Component } from 'react';
2. **class** App **extends** React.Component {
3. constructor() {
4. **super**();
5. **this**.state = { displayBio: **true** };
6. }
7. render() {
8. **const** bio = **this**.state.displayBio ? (
9. <div>
10. <p><h3>Javatpoint is one of the best Java training institute in Noida, Delhi, Gurugram, Ghaziabad and Faridabad. We have a team of experienced Java developers and trainers from multinational companies to teach our campus students.</h3></p>
11. </div>
12. ) : **null**;
13. **return** (
14. <div>
15. <h1> Welcome to JavaTpoint!! </h1>
16. { bio }
17. </div>
18. );
19. }
20. }
21. export **default** App

**React.Props**

Props stand for "**Properties**." They are **read-only** components. It is an object which stores the value of attributes of a tag and work similar to the HTML attributes. It gives a way to pass data from one component to other components. It is similar to function arguments. Props are passed to the component in the same way as arguments passed in a function.

Props are **immutable** so we cannot modify the props from inside the component. Inside the components, we can add attributes called props. These attributes are available in the component as **this.props** and can be used to render dynamic data in our render method.

When you need immutable data in the component, you have to add props to **reactDom.render()** method in the **main.js** file of your ReactJS project and used it inside the component in which you need. It can be explained in the below example

1. **import** React, { Component } from 'react';
2. **class** App **extends** React.Component {
3. render() {
4. **return** (
5. <div>
6. <h1> Welcome to { **this**.props.name } </h1>
7. <p> <h4> Javatpoint is one of the best Java training institute in Noida, Delhi, Gurugram, Ghaziabad and Faridabad. </h4> </p>
8. </div>
9. );
10. }
11. }
12. export **default** App;