

REACT

LESSON 6 – Props

CO2214 - PRACTICAL WORK ON CO2224

Props

- Props is Properties is the optional input that your component can accept. It's also allowed the component to be dynamic.

Note:

Our intention here is pass a name from App component to the Greet Component and render that name in the browser.

- To Specify prop for a Component we specify them as attributes.

To Specify a name property, we simply add name attribute and we assign the values.

In App.js

```
<Greet name="Bruce"/>  
<Greet name="Alice"/>  
<Greet name="Diana"/>
```

We are sending some property to Greet Component. But, how do we Retrieve this value in Greet Component.

It's a two-step process.

- I. Add a parameter to the functional Component.

```
export const Greet = (props) => <h1> Hello Inzam </h1>
```

You can name it anything you wanted. But the conventional is props.

- II. Use the parameter in the function body.

```
export const Greet = (props) => {  
  console.log(props)  
  return <h1> Hello {props.name} </h1>  
}
```

- Let's make other props to good understanding.

in App.js

I am going to add second attribute call heroName

```
< Greet name="Bruce" heroName="Batman" />  
< Greet name="Alice" heroName="Superman"/>  
< Greet name="Diana" heroName="Wonder Woman"/>
```

in Greet.js

```
export const Greet = (props) => {  
  console.log(props)  
  return <h1> Hello {props.name} a.k.a {props.heroName}</h1>  
}
```

- Sometimes it is also possible you might not have an idea as to what content it is being passed in. But we want a component to render that unknown content.
- We can do that by specifying the content between the opening and closing tag and retrieving it using the reserved children property in the props object.

in App.js

```
< Greet name="Bruce" heroName="Batman" >  
<p>This is Children props</p>  
</Greet>
```

in Greet.js

```
export const Greet = (props) => {  
  console.log(props)  
  return (  
    <div>  
      <h1> Hello {props.name} a.k.a {props.heroName} </h1>  
      {props.children}  
    </div>  
  )  
}
```

➤ We have to close all our content in one div rapid tag.

Now I am going to add button to the second Greet Component.

in App.js

```
<Greet name="Alice" heroName="Superman">  
  <button>Action</button>  
</Greet>
```

❖ So {props.children} is specify the content between the Component tag.

How to use props in Class Component?

in App.js

```
<Welcome name="Bruce" heroName="Batman"/>  
<Welcome name="Alice" heroName="Superman" />  
<Welcome name="Diana" heroName="Wonder Woman"/>
```

in Welcome.js

```
import React, {Component} from 'react'  
  
class Welcome extends Component {  
  
  render () {  
  
    return  
  
    <h1>Welcome {this.props.name} a.k.a {this.props.heroName}</h1>  
  
  }  
  
  export default Welcome
```

- Basically, you are accessing the props in Class Component with this keyword.
- React, it's going to bundle all its attribute in to an Object by using props.
- props are immutable, that means value cannot be assigned to read only property.
- If props are immutable than how do we maintain component data that may change over time?