

Parent to child data:

```
class Parent extends React.Component {state = { data : "Hello
World" }
render() {

    return (
        <div>
            <Child1/>                //no data to send
            <Child2 dataFromParent = {this.state.data} />
        </div>
    );
}
```

child component:

```
class Child2 extends React.Component {
render() {

return (
<div>
The data from parent is:{this.props.dataFromParent}
</div>
);
}
}
```

child to parent:

src\App.js

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

import Area from './components/Area';

import Parameter from './components/Parameter';
```

```
class App extends Component {
```

```
    constructor(props) {
```

```
        super(props)
```

```
this.state = {  
  data: 0,  
  len: 40,  
  bre: 50  
}  
this.updateState = this.updateState.bind(this);  
}  
  
updateState(calculation) {  
  if(calculation == "Area")  
  {  
    this.setState({data: this.state.len * this.state.bre})  
  }  
  else  
  {  
    this.setState({data: 2 * (this.state.len + this.state.bre)})  
  }  
}  
  
render() {  
  return (  
    <div>  
      Calculation: {this.state.data}
```

```
<Area update={this.updateState} />

<Parameter update={this.updateState} />

</div>

)

}

}

export default App;

src\components\Area.js

import React, { Component } from 'react';

class Area extends Component {
  render() {
    return (
      <div>

        Area:

        <button onClick={() => this.props.update('Area')}>

          Area

        </button>

      </div>

    );
  }
}
```

```
}
```

```
export default Area;
```

```
src\components\Parameter.js
```

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

```
class Parameter extends Component {
```

```
  render() {
```

```
    return (
```

```
      <div>
```

```
        Parameter:
```

```
        <button onClick={() => this.props.update('Parameter')}>
```

```
          Parameter
```

```
        </button>
```

```
      </div>
```

```
    );
```

```
  }
```

```
}
```

```
export default Parameter;
```

```
mouse event:
```

```
class MouseMover extends React.Component {  
  state = {  
    x: 0,  
    y: 0  
  };  
  
  handleMouseMove = e => {  
    this.setState({  
      x: e.clientX,  
      y: e.clientY  
    });  
  };  
  
  render() {  
    return (  
      <div onMouseMove={this.handleMouseMove}>  
        {this.state.x || this.state.y  
          ? "The mouse is at x: " + this.state.x + ", y: " + this.state.y  
          : "Move the mouse over this box"}  
      </div>  
    );  
  }  
}
```

```
export default MouseMover;
```