

Information Flow in React

Tuesday, March 22, 2022 4:20 PM

There are two way for information to pass between two Components

1. Parent to child

- Parent can pass information to child as 'prop'

```
<Child value={20} />
```

What can parent pass?

1. Parent can pass constants values like number or String

```
<Person name="Vivek" id={20} />
```

2. Parent can all pass it's state to the Child

```
<Person value={this.state.selectedPerson} />
```

3. We can pass normal variable (NOT RECOMMENDED)

- They are more like constants

```
<Person name={name} />
```

4. We can pass a method as 'prop'.

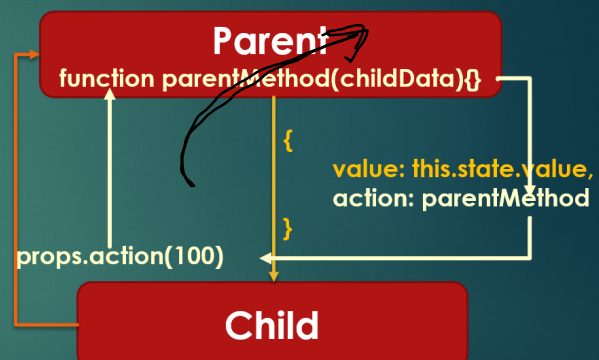
```
<Person greet={handleGreet} />
```

2. Child to Parent

- Now this handleGreet() is defined by the parent component
 - It will be called by the child component
 - It is more like a call back function
- When child calls this function they can pass a parameter
- This parameter will be received by the parent.
 - Thus child can send some information to the Parent

Communication between Components

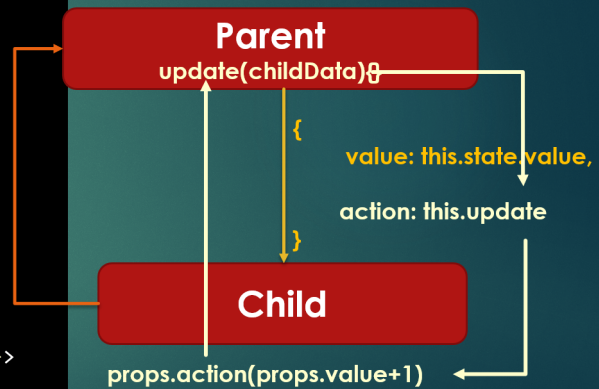
- ▶ Parent Passes Value to Child as props
 - ▶ Generally it passes it's state
- ▶ Child can communicate with parent by calling a method of the parent and passing information as parameter.
- ▶ Parent must first pass Child the method that child should call as part of props.
- ▶ Parent may update it's state on receiving the value.



1. P
2. C
3. T

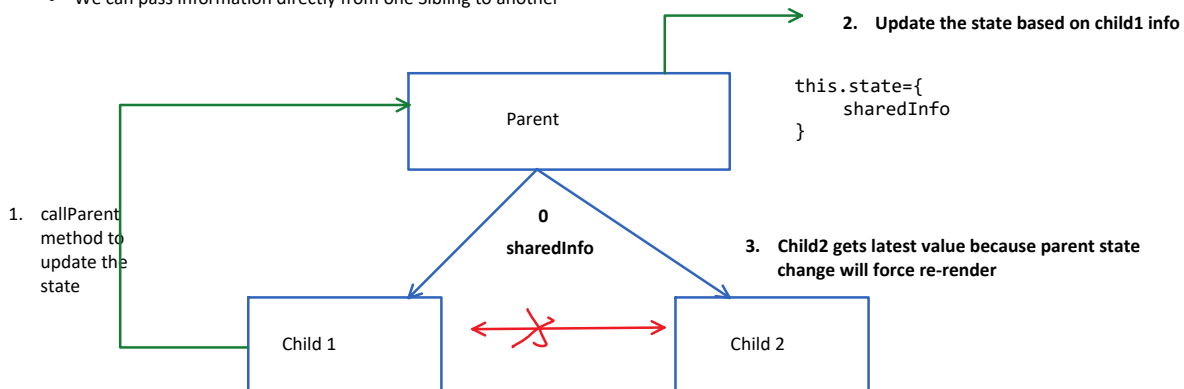
Communication between Components

```
class Parent extends React.Component{
  constructor(){
    this.state={ value:0 }
  }
  update=(value) { this.setState({value} );
  render(){
    return <Child value={this.state.value}
      action={this.update}
    />
  }
}
function Child ( props ) {
  return <button
    onClick={()=>props.action(props.value+1)}>
    {props.value}
  </button>
}
```



Sibling to Sibling

- Two children of a parent can be considered as siblings
- We can pass information directly from one Sibling to another



- When a sibling need to send some message to other sibling,
 - It should actually send the message to parent
 - Parent should update the state
 - Other child will automatically get the latest info.