

context API

Context provides a way to pass data through the component tree without having to pass props down manually at every level.

Without context

```
class App extends React.Component{
  state={
    name:"abc",
    age:12
  }
  render(){
return (
  <div>
    <Family name={this.state.name}/>
  </div>
)
}
}

class Family extends React.Component{
  render(){
    return (
      <div>
        <Person name={this.props.name} />
      </div>
    )
  }
}

class Person extends React.Component{
  render(){
    return (
      <div>i am {this.props.name}</div>
    )
  }
}
```

```
ReactDOM.render(<App/>,document.getElementById("mountNode"))
```

With context

```
const MyContext=React.createContext()

class App extends React.Component{
  state={
    name:"xyz",
    age:12
  }

  changeAge=()=>{
    this.setState(ps=>({age:ps.age+1}))
  }
  render(){
return (
  <MyContext.Provider value={{
    state:this.state,
    handleChangeAge:this.changeAge}}>
    <Family />
  </MyContext.Provider>
)
}
}

class Family extends React.Component{
  render(){
    return (
      <div>
        <Person />
      </div>
    )
  }
}

class Person extends React.Component{
  render(){
    return (
      <MyContext.Consumer>
      {
        (context)=>(
          <React.Fragment>
            <h3>i am {context.state.name}</h3>
            <h4>I am {context.state.age} yeas old</h4>
            <button onClick={context.handleChangeAge}>Change Age</button>
          </React.Fragment>
        )
      }
    )
  }
}
```

```
        </React.Fragment>
      )
    }
  </MyContext.Consumer>
)
}
}
```

```
ReactDOM.render(<App/>, document.getElementById("mountNode"))
```

Reference links -

Context API

<https://www.toptal.com/react/react-context-api>

<https://www.youtube.com/watch?v=XLJN4JfniH4>

<https://www.youtube.com/watch?v=OvM4hlxrqAw>

Fragments

https://www.youtube.com/watch?v=UMo9_W8lPbs

<https://www.youtube.com/watch?v=bHdh1T0-US4>

<https://reactjs.org/docs/fragments.html>