

CODE Button.css

```
.Button
{
    background: #cad2c5;
    display: flex;
    border: 1px solid rgba(0,0,0,0.05);
    box-sizing: border-box;
    align-items: center;
    justify-content: center;
    width: 25%;
    font-size: 24px;
    color: rgba(0, 0, 0, 0.5);
    height: 20%;
    min-width: 25%;
}

.Button[data-size="2"] {
    height: 40%;
}

.Button[data-value="null"] {
    pointer-events: none;
}

.Button:hover {
    background: #d7ddd3;
    cursor: default;
}
```

CODE Botton.js

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

import './Button.css';

class Button extends Component {
  render(){
    return(
      <div
        className="Button"
        onClick={this.props.onClick}
        data-size={this.props.size}
        data-value={this.props.value}>
        {this.props.label}
      </div>
    );
  }
}

export default Button;
```

CODE Display.css

```
.Display
{
    display: flex;
    justify-content: flex-end;
    align-items: center;
    background: #2b293d;
    height: 20%;
    color: #80c9c9;
    font-size: 24px;
}
```

CODE Display.js

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

import './Display.css';

class Display extends Component {
    render(){
        return(
            <div className="Display">
                {this.props.data}
            </div>
        );
    }
}

export default Display;
```

CODE Keypad.css

```
.Keypad
{
    display: flex;
    flex-wrap: wrap;
    flex-direction: column;
    height: 80%;
}
```

CODE Keypad.js

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

import './Keypad.css';

class Keypad extends Component {
    render(){
        return(
            <div className="Keypad">
                /* We are using composition instead of inheritance.
                read more: https://reactjs.org/docs/composition-vs-inheritance.html
            */
                {this.props.children}
            </div>
        );
    }
}

export default Keypad;
```

CODE Calculator.css

```
body {  
    display: flex;  
    align-items: center;  
    justify-content: center;  
    overflow: hidden;  
}  
  
.Calculator {  
    width: 400px;  
    height: 300px;  
    position: relative;  
    margin: 25px;  
}
```

CODE Calculator.js

```
import  
React,  
{Component}  
from  
'react';  
  
import Button from './Button';  
import Keypad from './Keypad';  
import './Calculator.css';  
import Display from './Display';  
  
class Calculator extends Component {  
    render(){  
        return(  

```

```

    <div className="Calculator">
      <Display data={this.state.data}/>
      <Keypad>
        <Button label="C" value="clear" />
        <Button label="7" value="7" />
        <Button label="4" value="4" />
        <Button label="1" value="1" />
        <Button label="0" value="0" />

        <Button label="/" value="/" />
        <Button label="8" value="8" />
        <Button label="5" value="5" />
        <Button label="2" value="2" />
        <Button label="." value="." />

        <Button label="x" value="*" />
        <Button label="9" value="9" />
        <Button label="6" value="6" />
        <Button label="3" value="3" />
        <Button label="" value="null" />

        <Button label="-" value="-" />
        <Button label="+" size="2" value="+" />
        <Button label="=" size="2" value="equal" />
      </Keypad>
    </div>
  );
}
}

export default Calculator;

```

CODE Calculator.js

```

import
React,
{Component}
from
'react';

import Button from './Button';

```

```

import './Calculator.css';
import Display from './Display';
import Keypad from './Keypad';

class Calculator extends Component {
  constructor() {
    super();
    this.state = { data: '' }
  }

  calculate = () => {
    try {
      const result = eval(this.state.data);
      this.setState({data: result});
    } catch (e) {
      this.setState({data: 'error'})
    }
  }

  handleClick = e => {
    const value = e.target.getAttribute('data-value');
    switch(value) {
      case 'clear':
        this.setState({ data: ''});
        break;
      case 'equal':
        this.calculate();
        break;
      default:
        this.setState({ data: this.state.data + value});
    }
  }

  render(){
    return(
      <div className="Calculator">
        <Display data={this.state.data}/>
        <Keypad>
          <Button onClick={this.handleClick} label="C" value="clear" />
          <Button onClick={this.handleClick} label="7" value="7" />
          <Button onClick={this.handleClick} label="4" value="4" />
          <Button onClick={this.handleClick} label="1" value="1" />
          <Button onClick={this.handleClick} label="0" value="0" />
        </Keypad>
      </div>
    )
  }
}

```

```

        <Button onClick={this.handleClick} label="/" value="/" />
        <Button onClick={this.handleClick} label="8" value="8" />
        <Button onClick={this.handleClick} label="5" value="5" />
        <Button onClick={this.handleClick} label="2" value="2" />
        <Button onClick={this.handleClick} label="." value="." />

        <Button onClick={this.handleClick} label="x" value="*" />
        <Button onClick={this.handleClick} label="9" value="9" />
        <Button onClick={this.handleClick} label="6" value="6" />
        <Button onClick={this.handleClick} label="3" value="3" />
        <Button onClick={this.handleClick} label="" value="null" />

        <Button onClick={this.handleClick} label="-" value="-" />
        <Button onClick={this.handleClick} label="+" size="2" value="+" />
        <Button onClick={this.handleClick} label="=" size="2" value="equal"
    />
    </Keypad>
  </div>
);
}
}

export default Calculator;

```