

# UI DESIGN DOCUMENT

## My Calculator

99+985			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## My Calculator

1084			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## My Calculator

123-53			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## My Calculator

70			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## My Calculator

59*23			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## My Calculator

1357			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## My Calculator

565/5			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## My Calculator

113			
(	BS	)	CLR
1	2	3	+
4	5	6	-
7	8	9	x
.	0	=	÷

## SOURCE CODE GITHUB REPOSITORY LINK

<https://github.com/HariPrasad5724/calculatorreact>

This calculator application has two components

1.ResultTextComponent.js - to display the result of operation

ResultTextComponent.js

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

class ButtonComponent extends Component {

  render() {
    return (
      <div className="button">
        <button name="(" onClick={e =>
this.props.onClick(e.target.name)}>(</button>
        <button name="BS" onClick={e =>
this.props.onClick(e.target.name)}>BS</button>
        <button name=")" onClick={e =>
this.props.onClick(e.target.name)}>)</button>
        <button name="CLR" onClick={e =>
this.props.onClick(e.target.name)}>CLR</button><br/>

        <button name="1" onClick={e =>
this.props.onClick(e.target.name)}>1</button>
        <button name="2" onClick={e =>
this.props.onClick(e.target.name)}>2</button>
        <button name="3" onClick={e =>
this.props.onClick(e.target.name)}>3</button>
        <button name="+" onClick={e =>
this.props.onClick(e.target.name)}>+</button><br/>

        <button name="4" onClick={e =>
this.props.onClick(e.target.name)}>4</button>
        <button name="5" onClick={e =>
this.props.onClick(e.target.name)}>5</button>
        <button name="6" onClick={e =>
this.props.onClick(e.target.name)}>6</button>
```

```

        <button name="-" onClick={e =>
this.props.onClick(e.target.name)}>-</button><br/>

        <button name="7" onClick={e =>
this.props.onClick(e.target.name)}>7</button>
        <button name="8" onClick={e =>
this.props.onClick(e.target.name)}>8</button>
        <button name="9" onClick={e =>
this.props.onClick(e.target.name)}>9</button>
        <button name="*" onClick={e =>
this.props.onClick(e.target.name)}>x</button><br/>

        <button name="." onClick={e =>
this.props.onClick(e.target.name)}>.</button>
        <button name="0" onClick={e =>
this.props.onClick(e.target.name)}>0</button>
        <button name="=" onClick={e =>
this.props.onClick(e.target.name)}>=</button>
        <button name="/" onClick={e =>
this.props.onClick(e.target.name)}>÷</button><br/>
    </div>
  );
}
}
export default ButtonComponent;

```

2.ButtonComponent.js - to display the buttons as keypad design.

ResultTextComponent.js

```

import React, {Component} from 'react';
class ResultComponent extends Component {

  render() {
    let {result} = this.props;
    return (
      <div className="result">

```

```

        <p>{result}</p>
    </div>

    );
}
}
export default ResultComponent;

```

## App.css - to design our components

### App.css

```

.App {
  text-align: center;
}

.result {
  height: 70px;
  background-color: #3b5998;
  width: 100%;
}

.result p {
  font-size: 40px;
  margin: 10px;
  border: 1px solid red;
  font-family: Verdana, Geneva, Tahoma, sans-serif;
}

.calculator-body {
  max-width: 400px;
  margin: auto;
}

.button {
  display: block;
  transition-duration: 0.7s;
}

button {

```

```

width: 25%;
height: 60px;
font-size: 35px;
background-color: #3b5998;
}

button:hover {
  background-color: #af4c96;
  color: white;
  box-shadow: 0 12px 16px 0 rgba(0,0,0,0.24), 0 17px 50px 0
rgba(0,0,0,0.19);
}

button:active{
  transform: translateY(4px);
}

```

App.js - to display by combining the components and rendering the webpage

App.js

```

import React, { Component } from 'react';
import './App.css';
import ResultComponent from './components/ResultTextComponent';
import ButtonComponent from './components/ButtonComponent';
class App extends Component {
  constructor() {
    super();
    this.state = {
      result: ""
    }
  }

  onClick = button => {
    if (button === "=") {
      this.calculate()
    }
    else if (button === "CLR") {

```



```

        this.reset()
    }
    else if(button === "BS"){
        this.backspace()
    }
    else {
        this.setState({
            result: this.state.result + button
        })
    }
};

calculate = () => {
    var checkResult = ''
    if(this.state.result.includes('--')){
        checkResult = this.state.result.replace('--','+')
    }
    else {
        checkResult = this.state.result
    }
    try {
        this.setState({
            // eslint-disable-next-line
            result: (eval(checkResult) || "" ) + ""
        })
    } catch (e) {
        this.setState({
            result: "error"
        })
    }
};

reset = () => {
    this.setState({
        result: ""
    })
};

backspace = () => {
    this.setState({

```

```
        result: this.state.result.slice(0, -1)
    })
};

render() {
    return (
        <div className="calculator-body">
            <h1>My Calculator</h1>
            <ResultComponent result={this.state.result}/>
            <ButtonComponent onClick={this.onClick}/>
        </div>
    );
}
}
export default App;
```