

MODUL 3
REACT COMPONENT

PEMROGRAMAN BERBASIS FRAMEWORK



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POLITEKNIK NEGERI MALANG
JURUSAN TEKNOLOGI INFORMASI
PROGRAM STUDI D4 TEKNIK INFORMATIKA

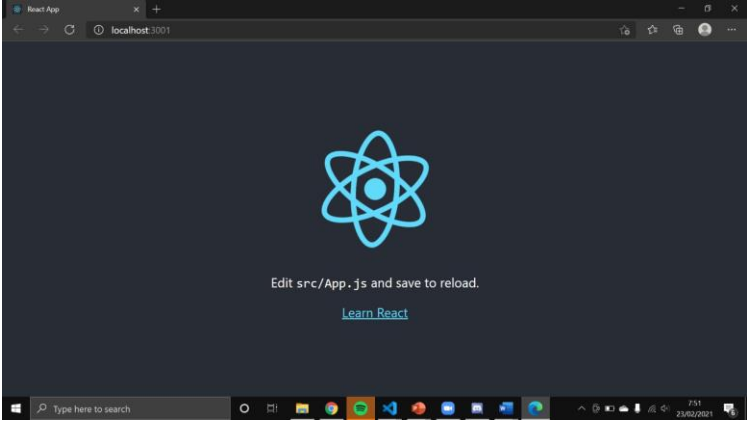
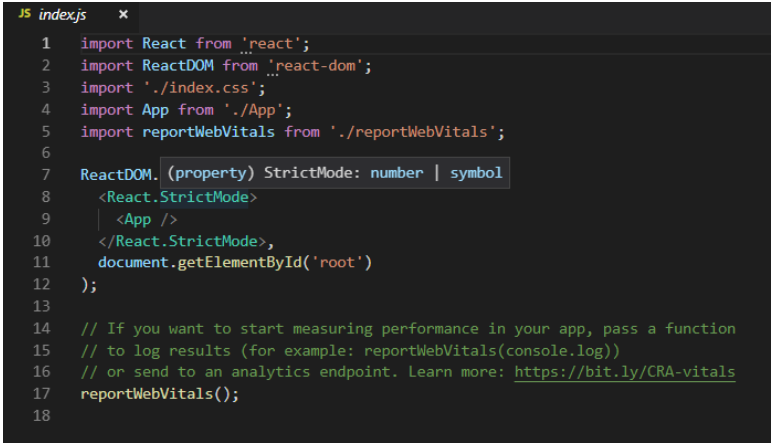
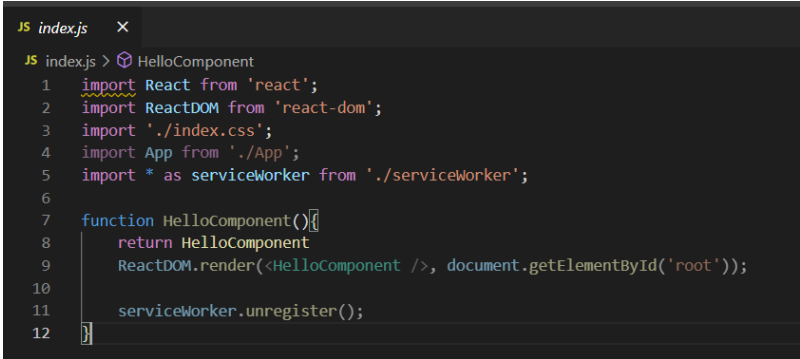
FEBRUARI 2021

Praktikum

a. Membuat Stateless component & statefull component

Project sebelumnya create hello world

Bagaimana cara membuat komponen dengan stateless component :

No	Keterangan
1	<p>Membuka halaman React</p> <p>Buka project create hello word ketikkan perintah npm start, lalu akan tampil seperti ini :</p> 
2	<p>Buka index.js</p> 
3	<p>Membuat function dengan hello component stateless component)</p> 

4	<p>Run di browser dan catat hasilnya</p> 
5	<p>Buat class component / statefull component dengan memanggil react .component</p> <pre> JS index.js X src > JS index.js > ... 1 import React from 'react'; 2 import ReactDOM from 'react-dom'; 3 import './index.css'; 4 import App from './App'; 5 import * as serviceWorker from 'register-service-worker'; 6 import { render } from '@testing-library/react' 7 8 const HelloComponent = () => { 9 return HelloComponent 10 11 class StateFullComponent extends React.Component{ 12 render() { 13 return <p>StateFullComponent</p> 14 } 15 } 16 17 ReactDOM.render(<StateFullComponent />, document.getElementById('root')); 18 serviceWorker.unregister(); 19 20 </pre>
6	<p>Memanggil StateFullComponent didalam react</p> 

Membuat Props

Props atau properties digunakan untuk menampung nilai yang nantinya dikirimkan ke suatu Component

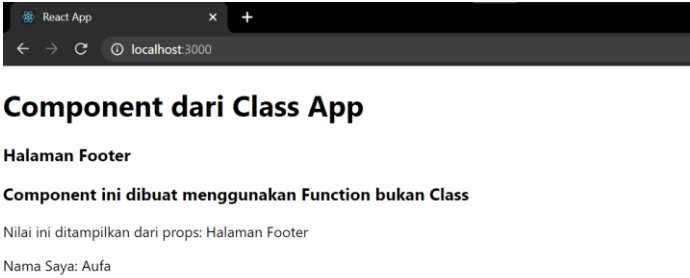
1	Buat Program seperti ini
---	--------------------------

```
JS index.js  JS Footer.js  JS App.js  X
src > JS App.js > App > render
1  import React, { Component } from 'react';
2  import Footer from './Footer';
3  //import List from './List';
4
5  class App extends Component {
6    render() {
7      return (
8        <div>
9          <h1>Component dari Class App</h1>
10         <Footer judul='Halaman Footer' nama='Aufa' />
11       </div>
12     );
13   }
14 }
15 export default App;
16
```

Menampilkan Props

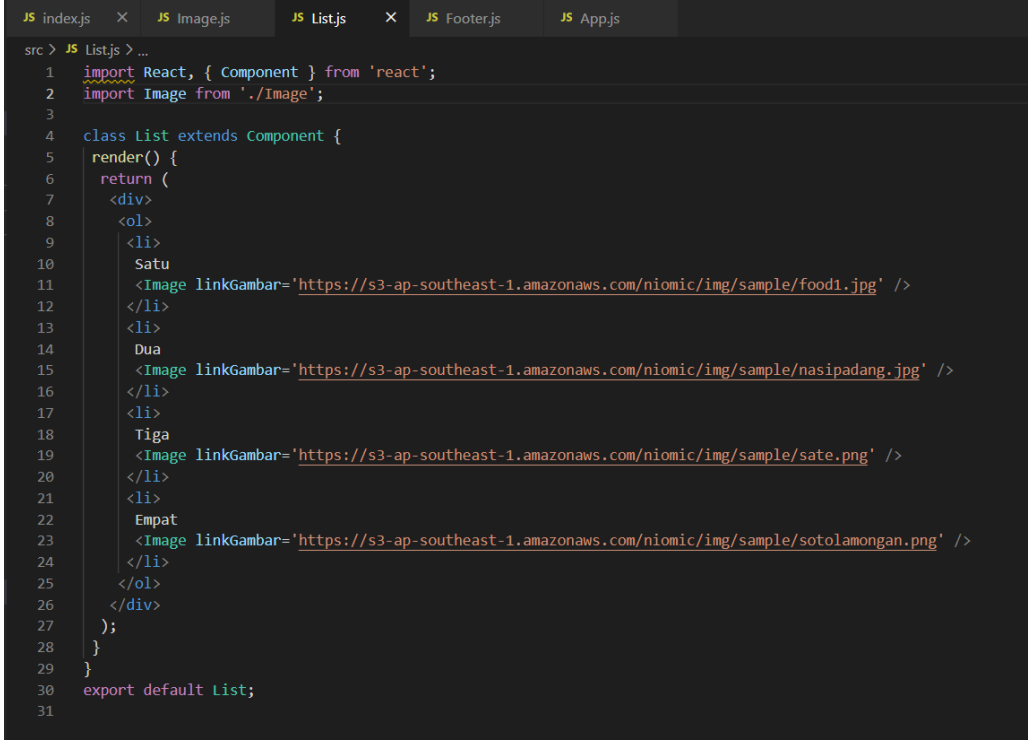
1	Buat Program berikut ini
---	--------------------------

```
JS index.js  JS Footer.js  X  JS App.js
src > JS Footer.js > Footer
1  import React from 'react'; // Component menggunakan Function
2  const Footer = (props) => {
3    return (
4      <div>
5        <h3>Halaman Footer</h3>
6        <h3>Component ini dibuat menggunakan Function bukan Class</h3>
7        <p>Nilai ini ditampilkan dari props: { props.judul } </p>
8        <p>Nama Saya: { props.nama } </p>
9      </div>
10    );
11  }
12  export default Footer;
```

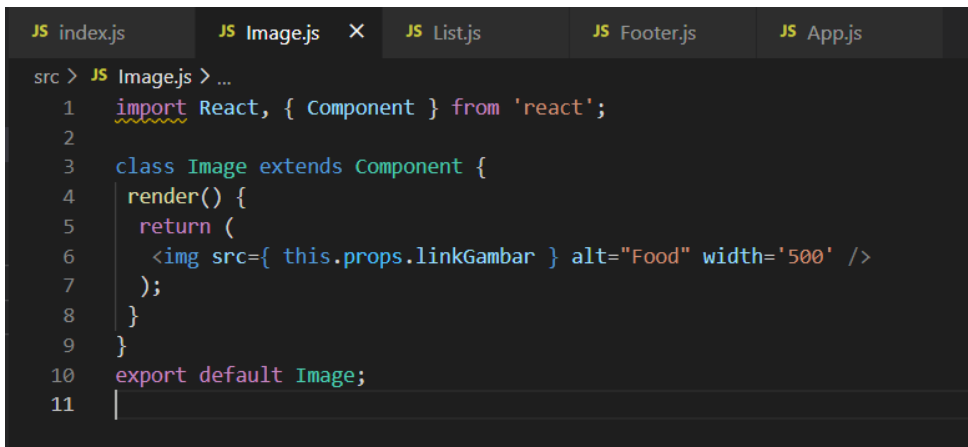
2	<p>Pada index ubah menjadi seperti ini</p> <pre>JS index.js X JS Footer.js JS App.js src > JS index.js 1 import React from 'react'; 2 import ReactDOM from 'react-dom'; 3 import './index.css'; 4 import App from './App'; 5 6 import reportWebVitals from './reportWebVitals'; 7 8 ReactDOM.render (9 <React.StrictMode> 10 <App /> 11 </React.StrictMode>, 12 document.getElementById("root") 13); 14 15 reportWebVitals();</pre>
3	<p>Hasilnya :</p> 





Props pada class Component

Component List

1	Buat program berikut
	 <pre>JS index.js X JS Image.js JS List.js X JS Footer.js JS App.js src > JS List.js > ... 1 import React, { Component } from 'react'; 2 import Image from './Image'; 3 4 class List extends Component { 5 render() { 6 return (7 <div> 8 9 10 Satu 11 <Image linkGambar='https://s3-ap-southeast-1.amazonaws.com/niomic/img/sample/food1.jpg' /> 12 13 14 Dua 15 <Image linkGambar='https://s3-ap-southeast-1.amazonaws.com/niomic/img/sample/nasipadang.jpg' /> 16 17 18 Tiga 19 <Image linkGambar='https://s3-ap-southeast-1.amazonaws.com/niomic/img/sample/sate.png' /> 20 21 22 Empat 23 <Image linkGambar='https://s3-ap-southeast-1.amazonaws.com/niomic/img/sample/sotolamongan.png' /> 24 25 26 </div> 27); 28 } 29 } 30 export default List; 31</pre>
2	Pada kode di atas, kita membuat empat buah list di mana masing masing list memanggil Component image. Kemudian Component Image di panggil dengan program berikut ini

Component Image

1	Buat program berikut
	 <pre>JS index.js JS Image.js X JS List.js JS Footer.js JS App.js src > JS Image.js > ... 1 import React, { Component } from 'react'; 2 3 class Image extends Component { 4 render() { 5 return (6 7); 8 } 9 } 10 export default Image; 11</pre>

2	Cara mengaksesnya adalah: <code>this.props.linkGambar</code> .
3	<p>Dengan begitu, setiap gambar yang tampil akan memanggil nilai <code>src</code> yang berbeda-beda, berdasarkan yang sudah kita tentukan di Component List di atas.</p> <div>     </div>

Lifecycle Component

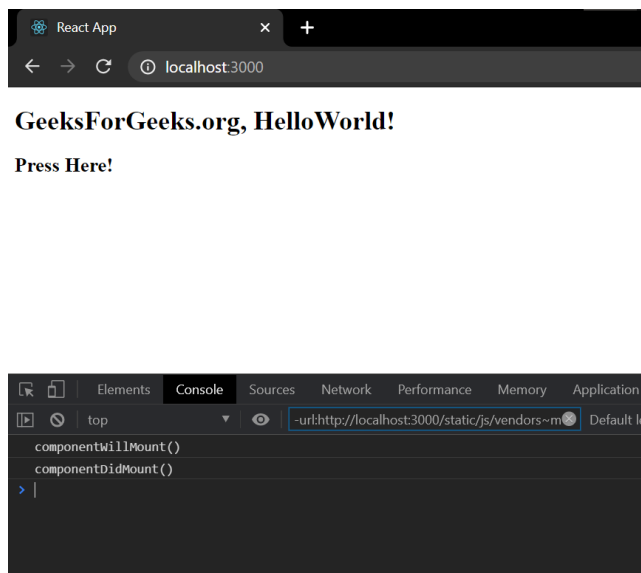
1	<p>Buat Program dibawah ini dan deteksilah bagian dari lifecycle Component</p> <pre> JS index.js JS Image.js JS List.js JS Footer.js JS App.js src > JS index.js > Test > componentDidUpdate 1 import React from 'react'; 2 import ReactDOM from 'react-dom'; 3 4 class Test extends React.Component { 5 constructor(props) 6 { 7 super(props); 8 this.state = { hello : "World!" }; 9 } 10 11 componentWillMount() 12 { 13 console.log("componentWillMount()"); 14 } 15 16 componentDidMount() 17 { 18 console.log("componentDidMount()"); 19 } 20 21 changeState() 22 { 23 this.setState({ hello : "Geek!" }); 24 } 25 26 render() </pre>
---	---

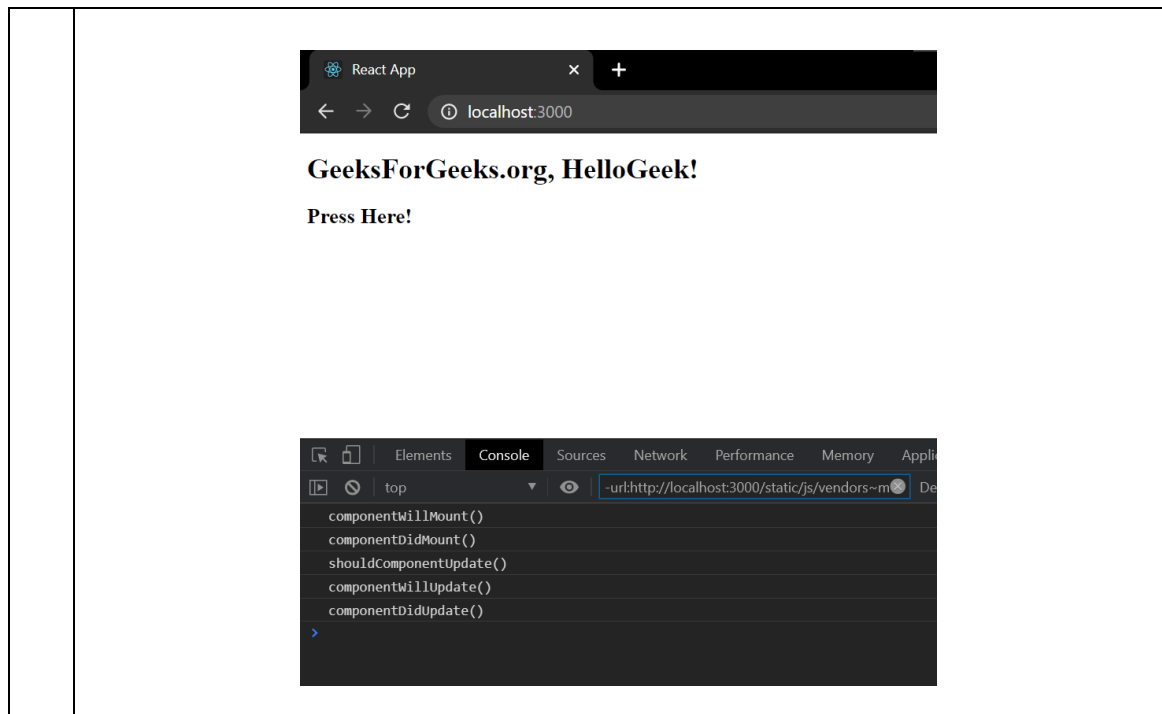
```

26 |   render()
27 |   {
28 |       return (
29 |           <div>
30 |               <h1>GeeksForGeeks.org, Hello{ this.state.hello }</h1>
31 |               <h2>
32 |                   <a onClick={this.changeState.bind(this)}>Press Here!</a>
33 |               </h2>
34 |           </div>);
35 |   }
36 |
37 |   shouldComponentUpdate(nextProps, nextState)
38 |   {
39 |       console.log("shouldComponentUpdate()");
40 |       return true;
41 |   }
42 |
43 |   componentWillUpdate()
44 |   {
45 |       console.log("componentWillUpdate()");
46 |   }
47 |
48 |   componentDidMount()
49 |   {
50 |       console.log("componentDidUpdate()");
51 |   }
52 | }
53 |
54 | ReactDOM.render(
55 |     <Test />,
56 |     document.getElementById('root'));
57 |

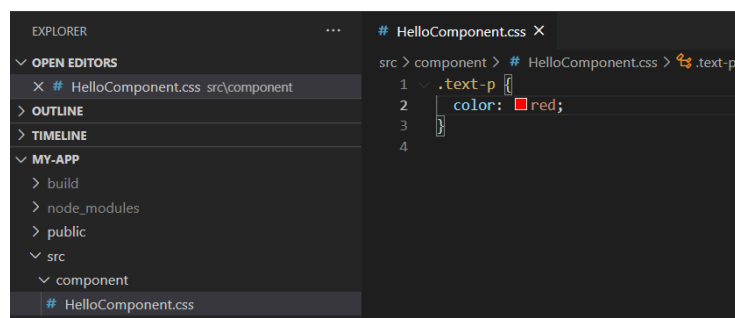
```

2 Hasilnya seperti berikut

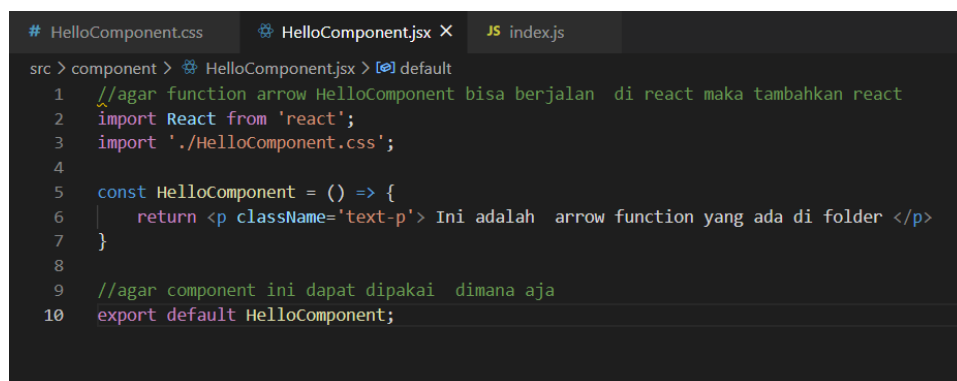




- Selain kita dapat membuat file stateless component pada folder component, kita juga dapat menambahkan file css seperti pada gambar berikut (sebaiknya nama file css disamakan dengan nama file js nya dan tambahkan code seperti berikut)



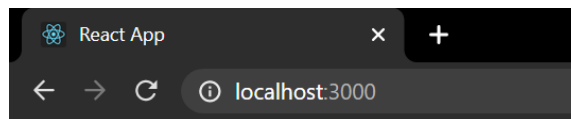
- Setelah itu import HelloComponent.css pada HelloComponent.jsx seperti pada berikut



Index.js

```
# HelloComponent.css  HelloComponent.jsx  JS index.js  X
src > JS index.js
2  import ReactDOM from 'react-dom';
3  import './component/HelloComponent.css';
4  import App from './App';
5
6  import reportWebVitals from './reportWebVitals';
7  import HelloComponent from './component/HelloComponent';
8
9  ReactDOM.render(<HelloComponent />, document.getElementById('root'));
10
11 // If you want to start measuring performance in your app, pass a function
12 // to log results (for example: reportWebVitals(console.log))
13 // or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
14 reportWebVitals();
```

Hasil :



Ini adalah arrow function yang ada di folder

Tugas

Membuat menu login seperti pada gambar menggunakan CSS

Login.jsx

```
# HelloComponent.css  HelloComponent.jsx  JS index.js  Login.jsx  # Login.css
src > component > Login.jsx > Login
1  //agar function arrow HelloComponent bisa berjalan di react maka tambahkan react
2  import React from 'react';
3  import './Login.css';
4
5  const Login = () => {
6
7      return(
8          <div>
9              <h2>Form Login</h2>
10             <form>
11                 <h1>Tugas Pertemuan Ketiga</h1>
12                 <div className="container">
13                     <label><b>Username</b></label>
14                     <input type="text" class="form-control" id="username" placeholder="masukkan username" required />
15
16                     <label for="password" class="col-sm-2 col-form-label"><b>Password</b></label>
17                     <input type="password" class="form-control" id="psw" placeholder="Masukkan Password Anda" required />
18
19                     <button type="submit">Login</button>
20
21                     <div style={{textAlign:"center"}}>
22                         <input type="checkbox" defaultChecked/> Remember Me
23                     </div>
24                 </div>
25
26                 <div className="container" style={{textAlign:"center"}}>
27                     <button type="button" className="cancelbtn">Cancel</button>
28                 </div>
29             </form>
30         </div>
31     );
32 }
33
34
35
36 //agar component ini dapat dipakai dimana aja
37 export default Login;
```

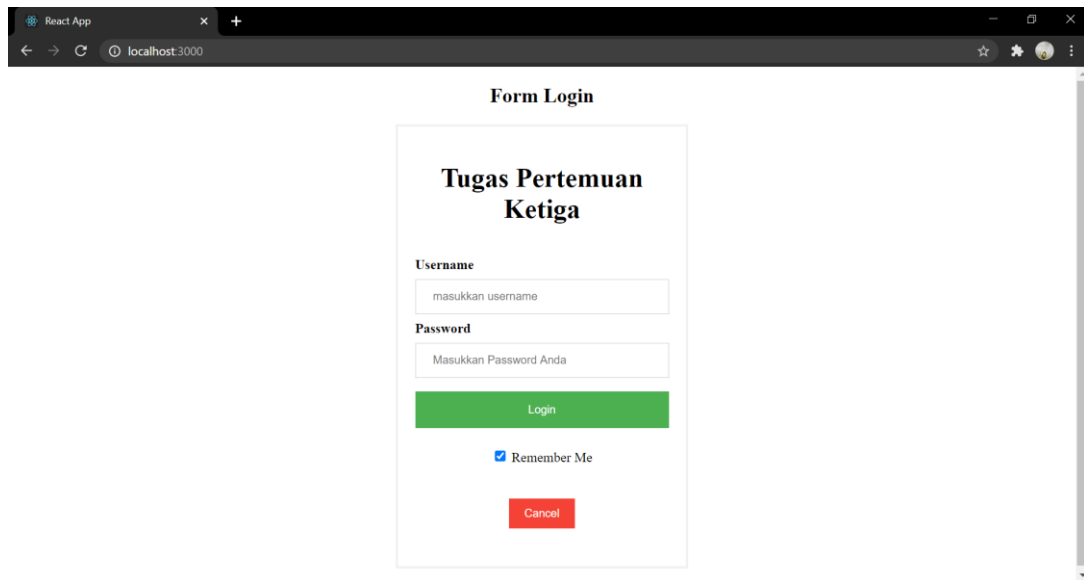
Login.css

```
1  form {
2    border: 3px solid #f1f1f1;
3    width: 300px;
4    /*meletakkan form ke tengah*/
5    margin: 20px auto;
6    padding: 20px 20px;
7  }
8
9  input[type="text"],
10 input[type="password"] {
11    width: 100%;
12    padding: 12px 20px;
13    margin: 8px 0;
14    display: inline-block;
15    border: 1px solid #ccc;
16    box-sizing: border-box;
17  }
18
19  button {
20    background-color: #4caf50;
21    color: white;
22    padding: 14px 20px;
23    margin: 8px 0;
24    border: none;
25    cursor: pointer;
26
27    width: 100%;
28  }
29  button:hover {
30    opacity: 0.8;
31  }
32
33  .cancelbtn {
34    width: auto;
35    padding: 10px 18px;
36    background-color: #f44336;
37  }
38
39  .container {
40    padding: 16px;
41  }
42
43  span.psw {
44    float: right;
45    padding-top: 16px;
46  }
47  h2,
48  h1 {
49    text-align: center;
50  }
```

Index.js

```
1  import React from 'react';
2  import ReactDOM from 'react-dom';
3  import './component/Login.css';
4  import App from './App';
5
6  import reportWebVitals from './reportWebVitals';
7  import Login from './component/Login';
8
9  ReactDOM.render(<Login />, document.getElementById('root'));
10
11  // If you want to start measuring performance in your app, pass a function
12  // to log results (for example: reportWebVitals(console.log))
13  // or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
14  reportWebVitals();
```

Hasil



The screenshot shows a web browser window with the title 'React App' and the address bar displaying 'localhost:3000'. The main content of the page is a login form titled 'Form Login' and 'Tugas Pertemuan Ketiga'. The form contains the following elements:

- Username**: A text input field with the placeholder text 'masukkan username'.
- Password**: A text input field with the placeholder text 'Masukkan Password Anda'.
- Login**: A green button.
- Remember Me**: A checkbox that is checked, with the label 'Remember Me'.
- Cancel**: A red button.

Link Youtube :

[youtube.com/watch?v=HxSz2XzShRA](https://www.youtube.com/watch?v=HxSz2XzShRA)

Link Github :

<https://github.com/liviayurike/Pemrograman-Berbasis-Framework/tree/master/Pertemuan%203>