TUGAS INDIVIDU

PEMROGRAMAN BERBASIS FRAMEWORK

PERTEMUAN 11

Disusun oleh:

Rijal Ammar Irsyadul Ibad

TI-3B/2041720184

D4 TEKNIK INFORMATIKA

TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

2023

1. **Slide 3**
   Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        const MyApp = () => {
            const [judul, setJudul] = React.useState("Belajar React");

            const handleButtonClick = () => {
                if (judul === "Belajar React") {
                    setJudul("Belajar JavaScript")
                } else {
                    setJudul("Belajar React");
                }
            }
            return (
                <div>
                    <h1>{judul}</h1>
                    <button onClick={handleButtonClick}>Click Me</button>
                </div>
            )
        }

        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

Belajar React

Click Me

Belajar JavaScript

Click Me

1. **Slide 5**
   Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        const MyApp = () => {
            const [judul, setJudul] = React.useState("Belajar React");
            console.log("Hello")
            const handleButtonClick = () => {
                if (judul === "Belajar React") {
                    setJudul("Belajar JavaScript")
                } else {
                    setJudul("Belajar React");
                }
            }
            return (
                <div>
                    <h1>{judul}</h1>
                    <button onClick={handleButtonClick}>Click Me</button>
                </div>
            )
        }

        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

2. **Slide 6**
   Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        const MyApp = () => {
            const [judul, setJudul] = React.useState("Belajar React");
            let foo = "Hei";

            const handleButtonClick = () => {
                foo = "Hello"
                if (judul === "Belajar React") {
                    setJudul("Belajar JavaScript")
                } else {
                    setJudul("Belajar React");
                }
            }
            const handleFooClick = () => {
                console.log(foo)
            }
            return (
                <div>
                    <h1>{judul}</h1>
                    <div>
                        <button onClick={handleButtonClick}>Click Me</button>
                        <button onClick={handleFooClick}>Get Foo</button>
                    </div>
                </div>
            )
        }

        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```
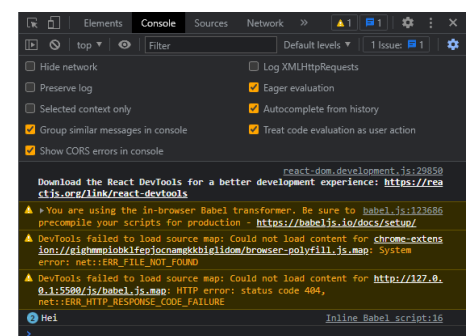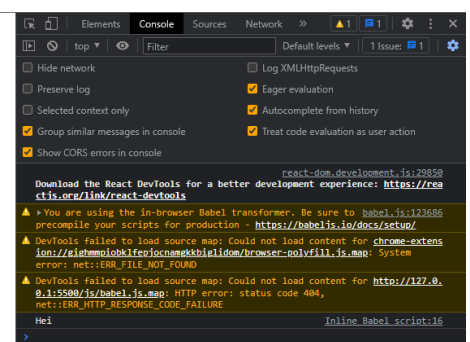
Hasil:

3. **Slide 10**

Code:

Hasil:

4. **Slide 13**

Code:

```
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        const MyApp = () => {
            const [judul, setJudul] = React.useState("Belajar React");
            const foo = React.useRef("Hei");

            const handleButtonClick = () => {
                foo.current = "Hello"
                if (judul === "Belajar React") {
                    setJudul("Belajar JavaScript")
                } else {
                    setJudul("Belajar React");
                }
            }
            const handleFooClick = () => {
                console.log(foo)
                console.log(foo.current)
            }
            return (
                <div>
                    <h1>{judul}</h1>
                    <div>
                        <button onClick={handleButtonClick}>Click Me</button>
                        <button onClick={handleFooClick}>Get Foo</button>
                    </div>
                </div>
            )
        }

        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```
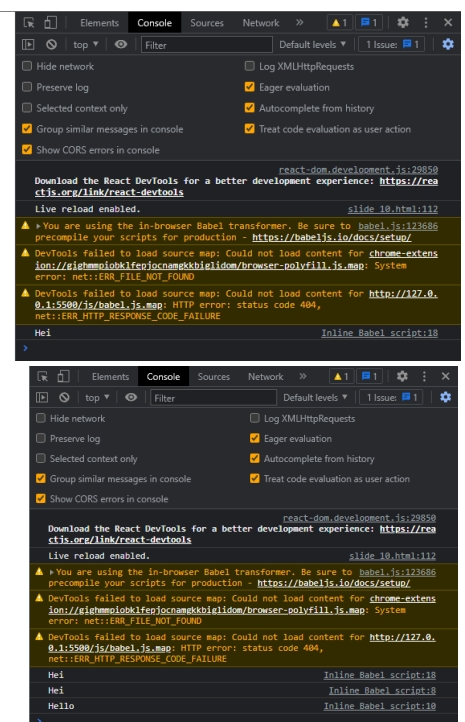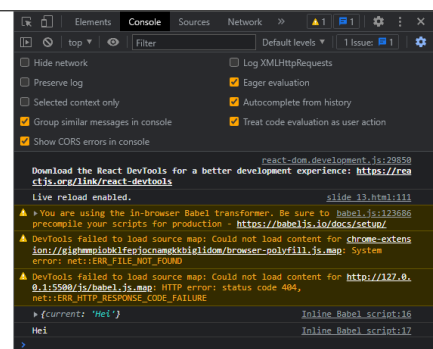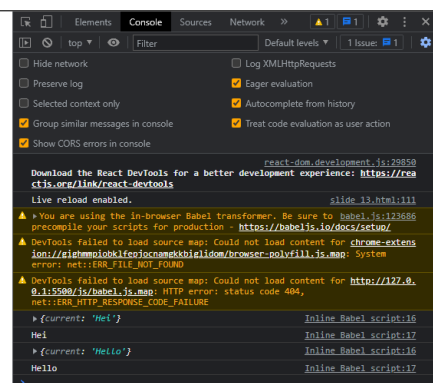
Hasil:

5. **Slide 15**
   Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {judul: "Belajar React"}
                this.foo = "Hei"
            }

            handleButtonClick = () => {
                this.foo = "Hello..."
                if (this.state.judul === "Belajar React") {
                    this.setState({ judul: "Belajar JavaScript"})
                } else {
                    this.setState({ judul: "Belajar React"})
                }
            }
            handleFooClick = () => {
                console.log(this.foo)
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.judul}</h1>
                        <div>
                            <button onClick={this.handleButtonClick}>Click Me</button>
                            <button onClick={this.handleFooClick}>Get Foo</button>
                        </div>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```
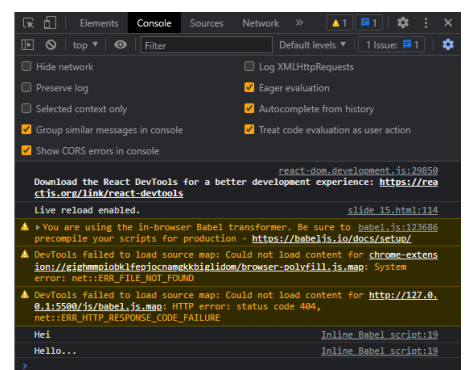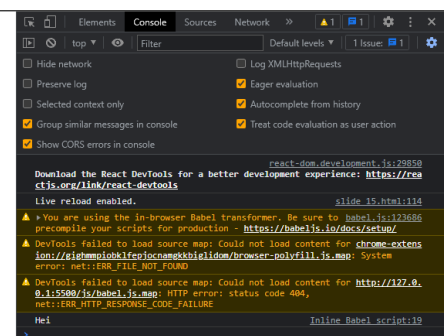
Hasil:

6. Slide 19

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            handleButtonClick = () => {
                let inputName = document.getElementById("input").value
                console.log(inputName)
            }
            render() {
                return (
                    <div>
                        <input type="text" id="input" />
                        <button onClick={this.handleButtonClick}>Check Input</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

7. **Slide 23**

Code:
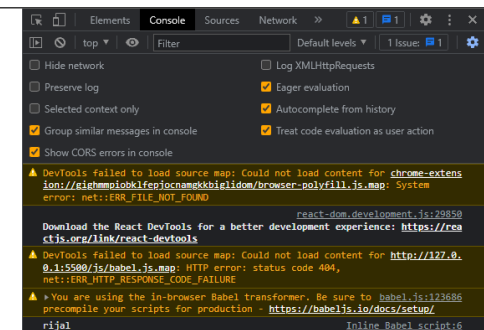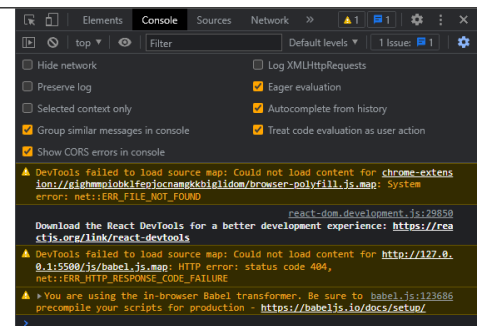
```
1   <body>
2       <div id = root></div>
3
4       <script src="js/react.development.js"></script>
5       <script src="js/react-dom.development.js"></script>
6       <script src="js/babel.js"></script>
7       <script type="text/babel">
8
9           class MyApp extends React.Component {
10              constructor(props) {
11                  super(props)
12                  this.state = {input: ""}
13              }
14
15              handleInputChange = (event) => {
16                  this.setState({ input: event.target.value })
17              }
18              handleButtonClick = () => {
19                  console.log(this.state.input)
20              }
21              render() {
22                  return (
23                      <div>
24                          <input type="text" onChange={this.handleInputChange} />
25                          <button onClick={this.handleButtonClick}>Check Input</button>
26                      </div>
27                  )
28              }
29          }
30          ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);
31
32      </script>
33  </body>
```
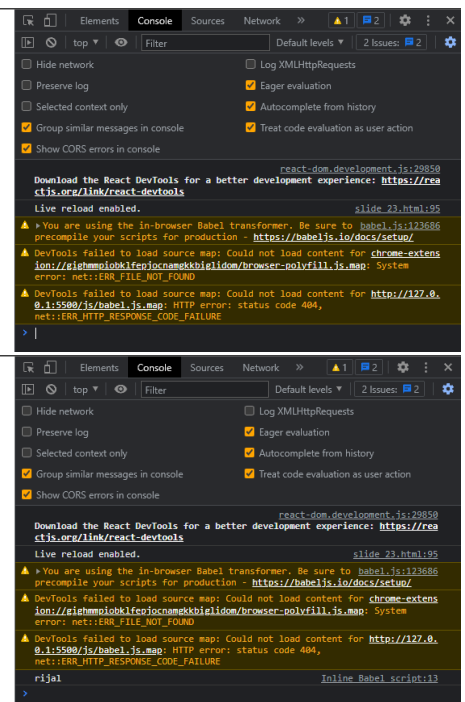
Hasil:

8. **Slide 26**
   Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {input: ""}
            }

            handleInputChange = (event) => {
                this.setState({ input: event.target.value })
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.input}</h1>
                        <input type="text" onChange={this.handleInputChange} />
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

Rijal Ammar

Rijal Ammar

9. **Slide 29**
   Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {input: "Rudi"}
            }

            handleInputChange = (event) => {
                this.setState({ input: event.target.value })
            }

            handleButtonClick = () => {
                this.setState({ input: "Lisa"})
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.input}</h1>
                        <input type="text" value={this.state.input}
                        onChange={this.handleInputChange} />
                        <button onClick={this.handleButtonClick}>Tukar Nama</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

10. **Slide 34**

Code:

```
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {alamat: "Jakarta"}
            }

            handleAlamatChange = (event) => {
                this.setState({ alamat: event.target.value })
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.alamat}</h1>
                        <textarea value={this.state.alamat}
                            onChange={this.handleAlamatChange}
                        />
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

Jakarta

```
Jakarta
```

Malang

```
Malang
```

11. Slide 38

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {buah: "mangga"}
            }

            handleBuahChange = (event) => {
                this.setState({ buah: event.target.value })
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.buah}</h1>
                        <select value={this.state.buah} onChange={this.handleBuahChange}>
                            <option value="semangka">Semangka</option>
                            <option value="pisang">Pisang</option>
                            <option value="kelapa">Kelapa</option>
                            <option value="mangga">Mangga</option>
                        </select>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

12. Slide 40

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {buah: "mangga"}
            }

            handleBuahChange = (event) => {
                this.setState({ buah: event.target.value })
            }

            handleButtonClick = () => {
                this.setState({ buah: "Semangka"})
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.buah}</h1>
                        <select value={this.state.buah} onChange={this.handleBuahChange}>
                            <option value="semangka">Semangka</option>
                            <option value="pisang">Pisang</option>
                            <option value="kelapa">Kelapa</option>
                            <option value="mangga">Mangga</option>
                        </select>
                        <button onClick={this.handleButtonClick}>Pilih Semangka</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

pisang

Pisang ∨

Pilih Semangka

Semangka

Semangka ∨

Pilih Semangka

13. Slide 42

Code:

```
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {belajarReact: true}
            }

            handleBelajarReactChange = (event) => {
                this.setState({ belajarReact: event.target.checked })
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.belajarReact.toString()}</h1>
                        <input type="checkbox"
                                id="belajarReact"
                                checked={this.state.belajarReact}
                                onChange={this.handleBelajarReactChange}  />
                        <label htmlFor="belajarReact">Belajar React</label>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

true

☑
Belajar React

false

☐
Belajar React

14. Slide 45

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {materi: ""}
            }

            handleMateriChange = (event) => {
                this.setState({ materi: event.target.value })
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.materi}</h1>
                        <div onChange={this.handleMateriChange}>
                            <input type="radio" value="React" name="materi" id="materi1" />
                            <label htmlFor="materi1">Belajar React</label>
                            <input type="radio" value="JavaScript" name="materi" id="materi2" />
                            <label htmlFor="materi2">Belajar JavaScript</label>
                            <input type="radio" value="Front End" name="materi" id="meteri3" />
                            <label htmlFor="meteri3">Belajar Front End</label>
                        </div>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

15. Slide 48

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {materi: "JavaScript"}
            }

            handleMateriChange = (event) => {
                this.setState({ materi: event.target.value })
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.materi}</h1>
                        <div onChange={this.handleMateriChange}>
                            <input type="radio" value="React" name="materi" id="materi1"
                                checked={this.state.materi === "React"}
                                onChange={this.handleMateriChange}/>
                            <label htmlFor="materi1">Belajar React</label>

                            <input type="radio" value="JavaScript" name="materi" id="materi2"
                                checked={this.state.materi === "JavaScript"}
                                onChange={this.handleMateriChange}/>
                            <label htmlFor="materi2">Belajar JavaScript</label>

                            <input type="radio" value="Front End" name="materi" id="meteri3"
                                checked={this.state.materi === "Front End"}
                                onChange={this.handleMateriChange}/>
                            <label htmlFor="meteri3">Belajar Front End</label>
                        </div>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

16. **Slide 51**

Code:

```
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {
                    nama: "",
                    email: "",
                    alamat: "",
                    jurusan: "",
                    jenisKelamin: "",
                    beasiswa: true,
                }
            }

            handleInputChange = (event) => {
                if (event.target.type === "checkbox") {
                    this.setState({ [event.target.name]: event.target.checked })
                } else {
                    this.setState({ [event.target.name]: event.target.value})
                }
            }


            handleButtonClick = () => {
                console.log(this.state)
            }
            render() {
                return (
                    <div className="container">
                        <div>
                            <label htmlFor="nama">Nama</label>
                            <input type="text" name="nama" id="nama"
                                onChange={this.handleInputChange} />
                        </div>

                        <div>
                            <label htmlFor="email">Email</label>
                            <input type="text" name="email" id="email"
                                onChange={this.handleInputChange} />
                        </div>

                        <div>
                            <label htmlFor="alamat">Alamat</label>
                            <input type="text" name="alamat" id="alamat"
                                onChange={this.handleInputChange} />
                        </div>

                        <div>
                            <label htmlFor="jurusan">Jurusan</label>
                            <select name="jurusan" value={this.state.jurusan} onChange={this.handleInputChange}>
                                <option value="Ilmu Komputer">Ilmu Komputer</option>
                                <option value="Sistem Informasi">Sistem Informasi</option>
                                <option value="Teknik Informatika">Teknik Informatika</option>
                                <option value="Teknik Komputer">Teknik Komputer</option>
                            </select>
                        </div>

                        <div>
                            <label>JenisKelamin</label>
                            <input type="radio" name="jenisKelamin" id="jenisKelamin1"
                                value="Pria" checked={this.state.jenisKelamin === "Pria"}
                                onChange={this.handleInputChange} />
                            <label htmlFor="jenisKelamin1">Pria</label>
                            <input type="radio" name="jenisKelamin" id="jenisKelamin2"
                                value="Perempuan" checked={this.state.jenisKelamin === "Perempuan"}
                                onChange={this.handleInputChange} />
                            <label htmlFor="jenisKelamin2">Perempuan</label>
                        </div>

                        <div>
                            <label>Status Beasiswa</label>
                            <input type="checkbox" name="beasiswa" id="beasiswa"
                                onChange={this.handleInputChange} />
                            <label htmlFor="beasiswa">Dapat Beasiswa</label>
                        </div>
                        <button onClick={this.handleButtonClick}>Check Form</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```
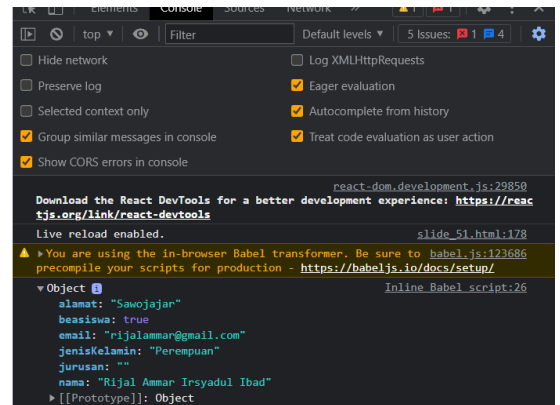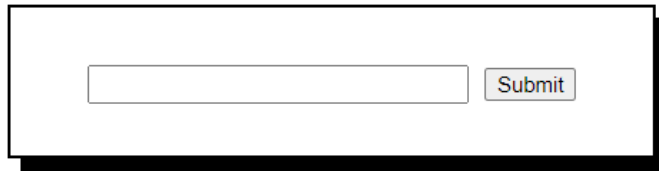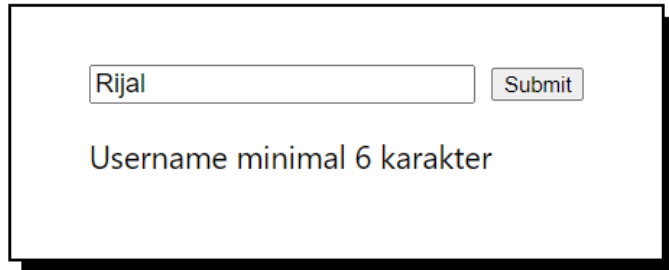
Hasil:

17. Slide 58
Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {
                    username: "",
                    pesanError: "",
                }
            }

            handleUsernameChange = (event) => {
                this.setState({ username: event.target.value})
            }

            handleFormSubmit = (event) => {
                event.preventDefault();
                console.log(this.state.username)

                if (this.state.username.trim() === "") {
                    this.setState({ pesanError: "Username tidak boleh kosong"})
                } else if (this.state.username.length < 6) {
                    this.setState({ pesanError: "Username minimal 6 karakter"})
                } else {
                    this.setState({ pesanError: ""})
                    alert("Username valid")
                }
            }

            render() {
                return (
                    <div className="container">
                        <form onSubmit={this.handleFormSubmit}>
                            <input type="text" value={this.state.username}
                                onChange={this.handleUsernameChange} />
                            <input type="submit" style={{ marginLeft: "10px" }} />
                        </form>
                        {this.state.pesanError && <p>{this.state.pesanError}</p>}
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```
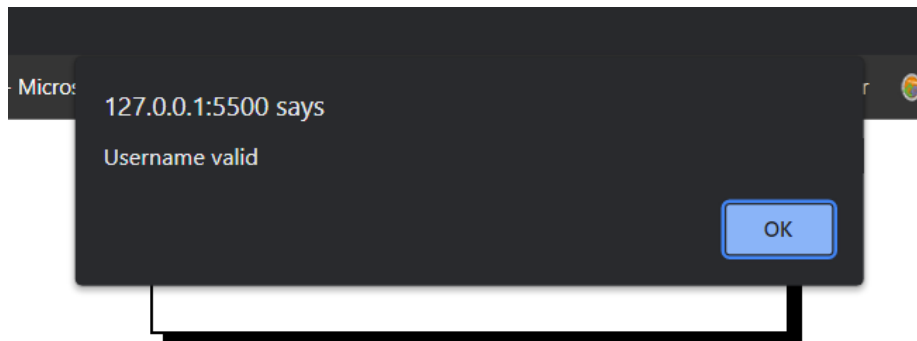
Hasil:

18. Slide 64
Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {
                    username: "",
                    email: "",
                    errors: {
                        username: "",
                        email: ""
                    },
                }
            }

            handleInputChange = (event) => {
                this.setState({ [event.target.name]: event.target.value})
            }

            handleFormSubmit = (event) => {
                event.preventDefault();

                const username = this.state.username;
                const email = this.state.email;
                let errors = this.state.errors;

                if (!username) {
                    errors.username = "Username Tidak Boleh Kososng"
                } else if (username.length < 6) {
                    errors.username = "Username minimal 6 karakter"
                } else {
                    errors.username = ""
                }

                if (!email) {
                    errors.email = "Email Tidak Boleh Kososng"
                } else if (email.length < 6) {
                    errors.email = "Email minimal 6 karakter"
                } else {
                    errors.email = ""
                }

                this.setState({ errors: errors})

                let formValid = true;
                for (let propName in errors) {
                    if (errors[propName].length > 0) {
                        formValid = false;
                    }
                }

                if (formValid) {
                    console.log(formValid)
                    alert("Username dan Email sudah valid")
                }
            }

            render() {
                return (
                    <div className="container">
                        <form onSubmit={this.handleFormSubmit} noValidate>

                            <div>
                                <label htmlFor="username">Username</label>
                                <input type="text" name="username" id="username"
                                    value={this.state.username}
                                    onChange={this.handleInputChange}/>
                                    {this.state.errors.username &&
                                        <smal>{this.state.errors.username}</smal>}
                            </div>

                            <div>
                                <label htmlFor="email">Email</label>
                                <input type="text" name="email" id="email"
                                    value={this.state.email}
                                    onChange={this.handleInputChange}/>
                                    {this.state.errors.email &&
                                        <smal>{this.state.errors.email}</smal>}
                            </div>
                            <input type="submit" style={{ marginTop: "10px"}} />
                        </form>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```
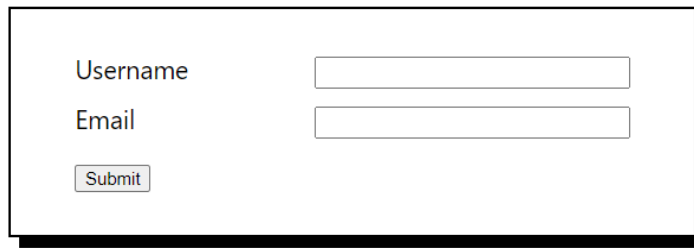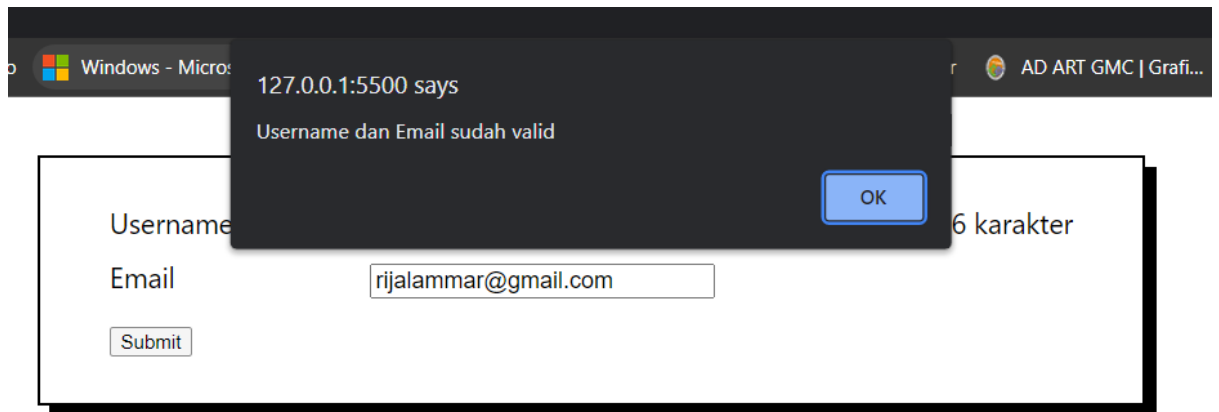
Hasil:

Username

Email

Submit

Windows - Micros...   AD ART GMC | Grafi...

127.0.0.1:5500 says

Username dan Email sudah valid

OK

Username   6 karakter

Email   rijalammar@gmail.com

Submit

19. Slide 66

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.state = {judul: "Belajar React"}
            }

            handleButtonClick = () => {
                this.setState({ judul: "Belajar JavaScript" })
            }
            render() {
                return (
                    <div>
                        <h1>{this.state.judul}</h1>
                        <button onClick={this.handleButtonClick}>Tukar Judul</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

Belajar React

Tukar Judul

Belajar JavaScript

Tukar Judul

20. Slide 68

Code:

```
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            handleButtonClick = () => {
                document.getElementById("judul").innerHTML = "Belajar JavaScript"
            }
            render() {
                return (
                    <div>
                        <h1 id="judul">Belajar React</h1>
                        <button onClick={this.handleButtonClick}>Tukar Judul</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

Belajar React

Tukar Judul

Belajar JavaScript

Tukar Judul

21. Slide 69

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.judulRef = React.createRef()
            }

            handleButtonClick = () => {
                this.judulRef.current.innerHTML = "Belajar JavaScript"
            }
            render() {
                return (
                    <div>
                        <h1 ref={this.judulRef}>Belajar React</h1>
                        <button onClick={this.handleButtonClick}>Tukar Judul</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil:

Belajar React

Tukar Judul

Belajar JavaScript

Tukar Judul

22. Slide 71

Code:

```html
<body>
    <div id = root></div>

    <script src="js/react.development.js"></script>
    <script src="js/react-dom.development.js"></script>
    <script src="js/babel.js"></script>
    <script type="text/babel">

        class MyApp extends React.Component {
            constructor(props) {
                super(props)
                this.inputRef = React.createRef()
            }

            handleButtonClick = () => {
                console.log(this.inputRef.current.value)
            }
            render() {
                return (
                    <div>
                        <input type="text" ref={this.inputRef} />
                        <button onClick={this.handleButtonClick}>Check Input</button>
                    </div>
                )
            }
        }
        ReactDOM.createRoot(document.getElementById('root')).render(<MyApp />);

    </script>
</body>
```

Hasil: