

Praktik 10

Pada praktik ini Anda akan mempelajari bagaimana cara menggunakan styling direact mulai dari basic css, css modules, styled components, tailwind-css dan material ui atau MUI.

Langkah 1 : Buat Project

```
npm create vite@latest praktik-10 -- --template react
```

```
cd praktik-10
```

```
npm install
```

```
npm install -D tailwindcss@3 postcss autoprefixer
```

```
npx tailwindcss init -p
```

```
npm install @mui/material @emotion/react @emotion/styled
```

Langkah 2 : Konfigurasi Tailwind-CSS

buka file : tailwind.config.js

```
/** @type {import('tailwindcss').Config} */
export default {
  content: [
    "./index.html",
    "./src/**/*.{js,ts,jsx,tsx}",
  ],
  theme: {
    extend: {},
  },
  plugins: [],
}
```

Buka file index.css

```
@tailwind base;
@tailwind components;
@tailwind utilities;
```

Langkah 3 : components/BasicCSS.jsx

```
1 import React from 'react';
2 import './BasicCSS.css';
3
4 function BasicCSS() {
5     return (
6         <div className="basic-css-demo">
7             <button className="basic-button">
8                 Basic CSS Button
9             </button>
10            <p className="basic-text">
11                This is styled with regular CSS
12            </p>
13        </div>
14    );
15 }
16
17 export default BasicCSS;
```

components/BasicCSS.css

```
1 .basic-css-demo {  
2     padding: 15px;  
3     background-color: #f8f9fa;  
4 }  
5  
6 .basic-button {  
7     background-color: #007bff;  
8     color: white;  
9     padding: 10px 20px;  
10    border: none;  
11    border-radius: 4px;  
12    cursor: pointer;  
13    margin-right: 10px;  
14 }  
15  
16 .basic-button:hover {  
17     background-color: #0056b3;  
18 }  
19  
20 .basic-text {  
21     color: #6c757d;  
22     font-style: italic;  
23     margin-top: 10px;  
24 }
```

Langkah 4 : components/CSSModules.jsx

```
1 import React from 'react';
2 import styles from './CSSModules.module.css';
3
4 function CSSModules() {
5     return (
6         <div className={styles.container}>
7             <button className={styles.button}>
8                 CSS Modules Button
9             </button>
10            <p className={styles.text}>
11                This uses CSS Modules for scoped styling
12            </p>
13        </div>
14    );
15 }
16
17 export default CSSModules;
```

components/CSSModules.module.css

```
1 .container {  
2     padding: 15px;  
3     background-color: #e9ecef;  
4     border-radius: 6px;  
5 }  
6  
7 .button {  
8     background-color: #28a745;  
9     color: white;  
10    padding: 10px 20px;  
11    border: none;  
12    border-radius: 4px;  
13    cursor: pointer;  
14    margin-right: 10px;  
15 }  
16  
17 .button:hover {  
18     background-color: #218838;  
19 }  
20  
21 .text {  
22     color: #495057;  
23     font-weight: 500;  
24     margin-top: 10px;  
25 }
```

Langkah 5 : components/StyledComponents.jsx

```
1 import React from 'react';
2 import styled from 'styled-components';
3
4 const StyledContainer = styled.div`
5   padding: 15px;
6   background-color: #fff3cd;
7   border-radius: 6px;
8   border: 1px solid #ffea7;
9 `;
10
11 const StyledButton = styled.button`
12   background-color: ${props => props.variant === 'primary' ? '#fd7e14' : '#6c757d'};
13   color: white;
14   padding: 10px 20px;
15   border: none;
16   border-radius: 4px;
17   cursor: pointer;
18   margin-right: 10px;
19
20   &:hover {
21     opacity: 0.8;
22     transform: translateY(-1px);
23   }
24 `;
25
26 const StyledText = styled.p`
27   color: #856404;
28   font-weight: bold;
29   margin-top: 10px;
30 `;
31
32 function StyledComponents() {
33   return (
34     <StyledContainer>
35       <StyledButton variant="primary">
36         Primary Styled
37       </StyledButton>
38       <StyledButton>
39         Default Styled
40       </StyledButton>
41       <StyledText>
42         This uses Styled Components (CSS-in-JS)
43       </StyledText>
44     </StyledContainer>
45   );
46 }
47
48 export default StyledComponents;
```


Langkah 6 : components/TailwindCSS.jsx

```
1 import React from 'react';
2
3 function TailwindCSS() {
4     return (
5         <div className="bg-purple-100 p-4 rounded-lg border border-purple-300">
6             <button className="bg-purple-600 text-white px-4 py-2 rounded hover:bg-
7                 purple-700 transition-colors mr-2">
8                 Tailwind Button
9             </button>
10            <button className="bg-pink-500 text-white px-4 py-2 rounded hover:bg-pink-600
11                 transition-colors">
12                 Another Button
13             </button>
14             <p className="text-purple-800 font-medium mt-2">
15                 Styled with Tailwind CSS utility classes
16             </p>
17         </div>
18     );
19 }
20
21 export default TailwindCSS;
```

Langkah 7 : components/ConditionalStyling.jsx

```
1 import React, { useState } from 'react';
2
3 function ConditionalStyling() {
4     const [status, setStatus] = useState('idle');
5     const [isActive, setIsActive] = useState(false);
6
7     // Conditional classes dengan template literals
8     const getStatusClasses = () => {
9         const baseClasses = "px-4 py-2 rounded font-semibold transition-colors mr-2";
10
11     switch (status) {
12         case 'success':
13             return `${baseClasses} bg-green-500 text-white`;
14         case 'error':
15             return `${baseClasses} bg-red-500 text-white`;
16         case 'loading':
17             return `${baseClasses} bg-yellow-500 text-white`;
18         default:
19             return `${baseClasses} bg-gray-500 text-white`;
20     }
21 };
22
23 // Conditional inline styles
24 const getBoxStyle = () => ({
25     padding: '15px',
26     borderRadius: '6px',
27     backgroundColor: isActive ? '#d4edda' : '#f8f9fa',
28     border: isActive ? '2px solid #28a745' : '1px solid #dee2e6',
29     transition: 'all 0.3s ease',
30     cursor: 'pointer'
31 });
32
33 return (
34     <div className="space-y-4">
35         <div>
36             <h3 className="text-lg font-semibold mb-2">Status Buttons:</h3>
37             <button
38                 className={getStatusClasses()}
39                 onClick={() => setStatus('success')}
40             >
41                 Success
42             </button>
43             <button
44                 className={getStatusClasses()}
45                 onClick={() => setStatus('error')}
46             >
47                 Error
48             </button>
49             <button
50                 className={getStatusClasses()}>
```

```
51             onClick={() => setStatus('loading')}
52         >
53             Loading
54         </button>
55     </div>
56
57     <div>
58         <h3 className="text-lg font-semibold mb-2">Toggle Box:</h3>
59         <div
60             style={getBoxStyle()}
61             onClick={() => setIsActive(!isActive)}
62         >
63             <p>Click me to toggle active state</p>
64             <p>Current: {isActive ? 'Active' : 'Inactive'}</p>
65         </div>
66     </div>
67 </div>
68 );
69 }
70
71 export default ConditionalStyling;
```

Langkah 8 : components/MaterialUI.jsx

```
1 import React from "react";
2 import { Button, Card, CardContent, Typography } from "@mui/material";
3
4 const MaterialUI = () => {
5     return (
6         <div className="space-y-4">
7             <Card>
8                 <CardContent>
9                     <Typography variant="h5" component="div" gutterBottom>
10                        Material-UI Components
11                     </Typography>
12                     <Typography variant="body2" color="text.secondary" gutterBottom>
13                        This is a simple card component using Material-UI.
14                     </Typography>
15                     <Button variant="contained" color="primary" sx={{ mr: 2 }}>
16                         Primary
17                     </Button>
18                     <Button variant="outlined">
19                         Outlined Button
20                     </Button>
21                 </CardContent>
22             </Card>
23         </div>
24     );
25 };
26
27 export default MaterialUI;
```

Langkah 9 : App.jsx

```
1 import React from 'react';
2 import BasicCSS from './components/BasicCSS';
3 import CSSModules from './components/CSSModules';
4 import StyledComponents from './components/StyledComponents';
5 import TailwindCSS from './components/TailwindCSS';
6 import ConditionalStyling from './components/ConditionalStyling';
7 import MaterialUI from './components/MaterialUI';
8 import './App.css';
9 import { Typography } from '@mui/material';
10
11 function App() {
12   return (
13     <div className="app">
14       <Typography variant="h5" component="h1" gutterBottom>
15         Demo Berbagai Metode Styling di React
16       </Typography>
17
18       <div className="demo-section">
19         <h2>1. Basic CSS</h2>
20         <BasicCSS />
21       </div>
22
23       <div className="demo-section">
24         <h2>2. CSS Modules</h2>
25         <CSSModules />
26       </div>
27
28       <div className="demo-section">
29         <h2>3. Styled Components</h2>
30         <StyledComponents />
31       </div>
32
33       <div className="demo-section">
34         <h2>4. Tailwind CSS</h2>
35         <TailwindCSS />
36       </div>
37
38       <div className="demo-section">
39         <h2>5. Conditional Styling</h2>
40         <ConditionalStyling />
41       </div>
42     </div>
43   )
44 }
45
46 export default App;
```

```
40           // import MaterialUI
41     </div>
42
43   <div className="demo-section">
44     <h2>6. Material UI</h2>
45     <MaterialUI />
46   </div>
47 </div>
48 );
49 }
50
51 export default App;
```

App.css

```
1 .app {  
2     max-width: 1200px;  
3     margin: 0 auto;  
4     padding: 20px;  
5     font-family: Arial, sans-serif;  
6 }  
7  
8 .demo-section {  
9     margin: 30px 0;  
10    padding: 20px;  
11    border: 1px solid #ddd;  
12    border-radius: 8px;  
13 }  
14  
15 .demo-section h2 {  
16     color: #333;  
17     border-bottom: 2px solid #007bff;  
18     padding-bottom: 10px;  
19 }
```

Index.css

```
1 @tailwind base;  
2 @tailwind components;  
3 @tailwind utilities;
```

Demo Berbagai Metode Styling di React

1. Basic CSS

Basic CSS Button

This is styled with regular CSS

2. CSS Modules

CSS Modules Button

This uses CSS Modules for scoped styling

3. Styled Components

Primary Styled

Default Styled

This uses Styled Components (CSS-in-JS)

4. Tailwind CSS

Tailwind Button

Another Button

Styled with Tailwind CSS utility classes

5. Conditional Styling

Status Buttons:

Success

Error

Loading

Toggle Box:

Click me to toggle active state

Current: Inactive

6. Material UI

Material-UI Components

This is a simple card component using Material-UI.

PRIMARY

OUTLINED BUTTON