

PRAKTIK PER. 3

Langkah 1: Struktur Project

Buatlah project dengan nama “praktik-3” dan buat struktur folder/file seperti ini :

```
src/
  └── components/
      ├── Header/
      │   ├── Header.jsx
      │   └── Header.css
      ├── UserCard/
      │   ├── UserCard.jsx
      │   └── UserCard.css
      ├── ProductList/
      │   ├── ProductList.jsx
      │   └── ProductList.css
      └── Button/
          ├── Button.jsx
          └── Button.css
  └── App.jsx
  └── App.css
```

Langkah 2: Membuat Komponen Button

File: src/components/Button/Button.jsx

Button.jsx

```
import React from 'react';
import './Button.css';

// Komponen Button dengan props
const Button = ({  
    children,  
    variant = 'primary', // default value  
    size = 'medium',  
    onClick,  
    disabled = false  
}) => {  
    return (  
        <button  
            className={`btn btn-${variant} btn-${size}`}  
            onClick={onClick}  
            disabled={disabled}  
        >  
            {children}  
        </button>  
    );  
};  
  
export default Button;
```

File: src/components/Button/Button.css

 Button.css

```
.btn {  
    border: none;  
    border-radius: 6px;  
    cursor: pointer;  
    font-family: inherit;  
    font-weight: 500;  
    transition: all 0.2s ease;  
}  
  
/* Variants */  
.btn-primary {  
    background-color: #007bff;  
    color: white;  
}  
  
.btn-secondary {  
    background-color: #6c757d;  
    color: white;  
}  
  
.btn-success {  
    background-color: #28a745;  
    color: white;  
}  
  
/* Sizes */
```

```
/* Sizes */
.btn-small {
  padding: 8px 16px;
  font-size: 14px;
}

.btn-medium {
  padding: 12px 24px;
  font-size: 16px;
}

.btn-large {
  padding: 16px 32px;
  font-size: 18px;
}

/* States */
.btn:hover:not(:disabled) {
  opacity: 0.9;
  transform: translateY(-1px);
}

.btn:disabled {
  opacity: 0.6;
  cursor: not-allowed;
}
```

Langkah 3: Membuat Komponen UserCard

File: src/components/UserCard/UserCard.jsx

UserCard.jsx

```
import React from 'react';
import Button from '../Button/Button';
import './UserCard.css';

const UserCard = ({  
  user,  
  onEdit,  
  onDelete  
}) => {  
  // Destructuring user object  
  const {  
    id,  
    name,  
    email,  
    role = 'User', // default value  
    avatar,  
    isActive = true  
  } = user;  
  
  return (  
    <div className={`user-card ${!isActive ? 'inactive' : ''}`}>  
      <div className="user-avatar">  
        <img  
          src={avatar || '/default-avatar.png'}  
          alt={`${name} avatar`}  
        />  
        {isActive && <span className="status-indicator"></span>}  
      </div>  
  
      <div className="user-info">  
        <h3 className="user-name">{name}</h3>  
        <p className="user-email">{email}</p>  
        <span className={`user-role role-${role.toLowerCase()}`}>  
          {role}  
        </span>  
      </div>  
  
      <div className="user-actions">  
        <Button  
          onClick={onEdit}>Edit</Button>  
        <Button  
          onClick={onDelete}>Delete</Button>  
      </div>  
    </div>  
  );  
};
```

```
        variant="secondary"
        size="small"
        onClick={() => onEdit(id)}
      >
    Edit
</Button>
<Button
  variant="secondary"
  size="small"
  onClick={() => onDelete(id)}
>
  Delete
</Button>
</div>
</div>
);
};

export default UserCard;
```

File: src/components/UserCard/UserCard.css

UserCard.css

```
.user-card {  
    background: white;  
    border-radius: 12px;  
    padding: 20px;  
    box-shadow: 0 2px 8px rgba(0,0,0,0.1);  
    display: flex;  
    align-items: center;  
    gap: 16px;  
    transition: all 0.3s ease;  
}  
  
.user-card.inactive {  
    opacity: 0.6;  
    background-color: #f8f9fa;  
}  
  
.user-avatar {  
    position: relative;  
    width: 60px;  
    height: 60px;  
}  
  
.user-avatar img {  
    width: 100%;  
    height: 100%;  
    border-radius: 50%;  
    object-fit: cover;  
}  
  
.status-indicator {  
    position: absolute;  
    bottom: 2px;  
    right: 2px;  
    width: 12px;  
    height: 12px;  
    background-color: #28a745;  
    border: 2px solid white;  
    border-radius: 50%;  
}
```

```
.user-info {
  flex: 1;
}

.user-name {
  margin: 0 0 4px 0;
  color: #333;
  font-size: 18px;
}

.user-email {
  margin: 0 0 8px 0;
  color: #666;
  font-size: 14px;
}

.user-role {
  padding: 4px 8px;
  border-radius: 12px;
  font-size: 12px;
  font-weight: 500;
}

.role-admin {
  background-color: #e3f2fd;
  color: #1976d2;
}

.role-user {
  background-color: #f3e5f5;
  color: #7b1fa2;
}

.role-moderator {
  background-color: #e8f5e8;
  color: #388e3c;
}

.user-actions {
  display: flex;
  gap: 8px;
}
```

Langkah 4: Membuat Komponen ProductList

File: src/components/ProductList/ProductList.jsx



ProductList.jsx

```
1 import React from 'react';
2 import './ProductList.css';
3
4 // Komponen ProductItem (internal component)
5 const ProductItem = ({ product, onAddToCart }) => {
6   const { id, name, price, category, image, stock } = product;
7
8   return (
9     <div className="product-item">
10       <div className="product-image">
11         <img src={image} alt={name} />
12         {stock === 0 && <div className="out-of-stock">Habis</div>}
13       </div>
14
15       <div className="product-info">
16         <span className="product-category">{category}</span>
17         <h4 className="product-name">{name}</h4>
18         <p className="product-price">Rp {price.toLocaleString('id-ID')}</p>
19
20         <button
21           className={`add-to-cart-btn ${stock === 0 ? 'disabled' : ''}`}
22           onClick={() => onAddToCart(product)}
23           disabled={stock === 0}
24         >
25           {stock === 0 ? 'Stok Habis' : 'Tambah ke Keranjang'}
26         </button>
27       </div>
28     </div>
29   );
30 };
31
32 // Komponen ProductList utama
33 const ProductList = ({ products, onAddToCart }) => {
34   // Jika tidak ada products
35   if (!products || products.length === 0) {
36     return (
37       <div className="product-list-empty">
38         <p>Tidak ada produk tersedia</p>
39       </div>
40     );
41   }
```

```
41
42
43 return (
44     <div className="product-list">
45         <h2>Daftar Produk ({products.length} items)</h2>
46
47         <div className="products-grid">
48             {products.map(product => (
49                 <ProductItem
50                     key={product.id}
51                     product={product}
52                     onAddToCart={onAddToCart}
53                 />
54             ))}
55         </div>
56     </div>
57 );
58 };
59
60 export default ProductList;
```

File: src/components/ProductList/ProductList.css



ProductList.css

```
1 .product-list {  
2   padding: 20px;  
3 }  
4  
5 .product-list h2 {  
6   margin-bottom: 20px;  
7   color: #333;  
8 }  
9  
10 .products-grid {  
11   display: grid;  
12   grid-template-columns: repeat(auto-fill, minmax(250px, 1fr));  
13   gap: 20px;  
14 }  
15  
16 .product-item {  
17   background: white;  
18   border-radius: 12px;  
19   overflow: hidden;  
20   box-shadow: 0 2px 8px rgba(0,0,0,0.1);  
21   transition: transform 0.2s ease;  
22 }  
23  
24 .product-item:hover {  
25   transform: translateY(-4px);  
26 }  
27  
28 .product-image {  
29   position: relative;  
30   height: 200px;  
31   overflow: hidden;  
32 }  
33  
34 .product-image img {  
35   width: 100%;  
36   height: 100%;  
37   object-fit: cover;  
38 }  
39  
40 .out-of-stock {  
41   position: absolute;  
42   top: 10px;  
43   right: 10px;  
44   background-color: black;  
45   color: white;  
46   padding: 5px 10px;  
47   font-size: 10px;  
48   opacity: 0.8;  
49 }  
50  
51 .product-item .product-image {  
52   position: absolute;  
53   top: 0;  
54   left: 0;  
55   width: 100%;  
56   height: 100%;  
57 }
```

```
43   right: 10px,
44   background: rgba(0,0,0,0.7);
45   color: white;
46   padding: 4px 8px;
47   border-radius: 4px;
48   font-size: 12px;
49 }
50
51 .product-info {
52   padding: 16px;
53 }
54
55 .product-category {
56   font-size: 12px;
57   color: #666;
58   text-transform: uppercase;
59   letter-spacing: 0.5px;
60 }
61
62 .product-name {
63   margin: 8px 0;
64   color: #333;
65   font-size: 16px;
66   line-height: 1.4;
67 }
68
69 .product-price {
70   font-size: 18px;
71   font-weight: bold;
72   color: #007bff;
73   margin: 8px 0 16px 0;
74 }
75
76 .add-to-cart-btn {
77   width: 100%;
78   padding: 12px;
79   background-color: #28a745;
80   color: white;
81   border: none;
82   border-radius: 6px;
83   font-size: 14px;
84   font-weight: 500;
85   cursor: pointer;
86   transition: background-color 0.2s;
87 }
88
89 .add-to-cart-btn:hover:not(.disabled) {
90   background-color: #218838;
```

```
91 }
92
93 .add-to-cart-btn.disabled {
94   background-color: #6c757d;
95   cursor: not-allowed;
96 }
97
98 .product-list-empty {
99   text-align: center;
100  padding: 40px;
101  color: #666;
102 }
```

Langkah 5: Membuat Komponen Header

File: src/components/Header/Header.jsx

Header.jsx

```
1 import React from 'react';
2 import './Header.css';
3
4 const Header = ({ title, subtitle, user }) => {
5   return (
6     <header className="app-header">
7       <div className="header-content">
8         <div className="header-text">
9           <h1 className="header-title">{title}</h1>
10          {subtitle && <p className="header-subtitle">{subtitle}</p>}
11        </div>
12
13        {user && (
14          <div className="user-info">
15            <span>Halo, {user.name}</span>
16            <img
17              src={user.avatar}
18              alt={user.name}
19              className="user-avatar"
20            />
21          </div>
22        )}
23      </div>
24    </header>
25  );
26};
27
28 export default Header;
```

File: src/components/Header/Header.css



Header.css

```
1 .app-header {  
2   background: linear-gradient(135deg, #667eea 0%, #764ba2 100%);  
3   color: white;  
4   padding: 20px 0;  
5   box-shadow: 0 2px 10px rgba(0,0,0,0.1);  
6 }  
7  
8 .header-content {  
9   max-width: 1200px;  
10  margin: 0 auto;  
11  padding: 0 20px;  
12  display: flex;  
13  justify-content: space-between;  
14  align-items: center;  
15 }  
16  
17 .header-title {  
18   margin: 0 0 5px 0;  
19   font-size: 2.2rem;  
20   font-weight: 700;  
21 }  
22  
23 .header-subtitle {  
24   margin: 0;  
25   opacity: 0.9;  
26   font-size: 1.1rem;  
27 }  
28  
29 .user-info {  
30   display: flex;  
31   align-items: center;  
32   gap: 12px;  
33   background: rgba(255, 255, 255, 0.1);  
34   padding: 8px 16px;  
35   border-radius: 20px;  
36   backdrop-filter: blur(10px);  
37 }  
38  
39 .user-info span {  
40   font-weight: 500;  
41 }  
42  
43 .user-avatar {
```

```
43 .user-avatar {
44   width: 32px;
45   height: 32px;
46   border-radius: 50%;
47   object-fit: cover;
48   border: 2px solid rgba(255, 255, 255, 0.3);
49 }
50
51 @media (max-width: 768px) {
52   .header-content {
53     flex-direction: column;
54     gap: 15px;
55     text-align: center;
56   }
57
58   .header-title {
59     font-size: 1.8rem;
60   }
61 }
```

Langkah 6: Mengintegrasikan di App.jsx

File: src/App.jsx



App.jsx

```
1 import React, { useState } from 'react';
2 import './App.css';
3
4 // Import komponen
5 import Header from './components/Header/Header';
6 import UserCard from './components/UserCard/UserCard';
7 import ProductList from './components/ProductList/ProductList';
8 import Button from './components/Button/Button';
9
10 function App() {
11     // State untuk data user yang login
12     const [currentUser] = useState({
13         name: 'Admin',
14         avatar: './admin.png'
15     });
16
17     // State untuk data users
18     const [users, setUsers] = useState([
19         {
20             id: 1,
21             name: 'Ahmad Rizki',
22             email: 'ahmad@example.com',
23             role: 'Admin',
24             avatar: './user.png',
25             isActive: true
26         },
27         {
28             id: 2,
29             name: 'Sari Dewi',
30             email: 'sari@example.com',
31             role: 'User',
32             avatar: './user.png',
33             isActive: true
34         },
35         {
36             id: 3,
37             name: 'Budi Santoso',
38             email: 'budi@example.com',
39             role: 'Moderator',
40             avatar: './user.png',
41             isActive: false
42         }
43     ]);
44 }
```

```
43 // ...
44
45 // State untuk data products
46 const [products, setProducts] = useState([
47   {
48     id: 1,
49     name: 'Laptop ASUS VivoBook',
50     price: 8500000,
51     category: 'Electronics',
52     image: './laptop.png',
53     stock: 5
54   },
55   {
56     id: 2,
57     name: 'Smartphone Samsung A54',
58     price: 4200000,
59     category: 'Electronics',
60     image: './phone.png',
61     stock: 0
62   },
63   {
64     id: 3,
65     name: 'Buku Pemrograman React',
66     price: 150000,
67     category: 'Books',
68     image: './book.png',
69     stock: 10
70   },
71   {
72     id: 4,
73     name: 'Mouse Wireless Logitech',
74     price: 350000,
75     category: 'Electronics',
76     image: './mouse.png',
77     stock: 15
78   }
79 ]);
80
81 // Handler functions
82 const handleEditUser = (userId) => {
83   alert(`Edit user dengan ID: ${userId}`);
84 };
85
86 const handleDeleteUser = (userId) => {
87   setUsers(users.filter(user => user.id !== userId));
88 };
89
90 const handleAddToCart = (product) => {
91   // Add product to cart logic here
92 }
```

```
91     alert(`Menambahkan ${product.name} ke keranjang`);
92 }
93
94 const handleAddNewUser = () => {
95     const newUser = {
96         id: users.length + 1,
97         name: `User Baru ${users.length + 1}`,
98         email: `user${users.length + 1}@example.com`,
99         role: 'User',
100        avatar: './user.png',
101        isActive: true
102    };
103    setUsers([...users, newUser]);
104};
105
106 const handleAddNewProduct = () => {
107     const newProduct = {
108         id: products.length + 1,
109         name: `Produk Baru ${products.length + 1}`,
110         price: Math.floor(Math.random() * 1000000) + 100000,
111         category: 'Other',
112         image: './others.png',
113         stock: Math.floor(Math.random() * 20)
114    };
115    setProducts([...products, newProduct]);
116};
117
118 return (
119     <div className="App">
120         {/* Header Component dengan props */}
121         <Header
122             title="Demo Komponen React dengan Props"
123             subtitle="Pemrograman Web Modern - Pertemuan 3"
124             user={currentUser}
125         />
126
127         <main className="App-main">
128             {/* Section Users */}
129             <section className="section">
130                 <div className="section-header">
131                     <h2>Manajemen Pengguna ({users.length} users)</h2>
132                     <Button
133                         variant="success"
134                         onClick={handleAddNewUser}
135                     >
136                         + Tambah User
137                     </Button>
138                 </div>
```

```
139
140     <div className="users-grid">
141       {users.map(user => (
142         <UserCard
143           key={user.id}
144           user={user}
145           onEdit={handleEditUser}
146           onDelete={handleDeleteUser}
147         />
148       ))}
149     </div>
150   </section>
151
152   {/* Section Products */}
153   <section className="section">
154     <div className="section-header">
155       <h2>Katalog Produk</h2>
156       <Button
157         variant="primary"
158         onClick={handleAddNewProduct}
159       >
160         + Tambah Produk
161       </Button>
162     </div>
163     <ProductList
164       products={products}
165       onAddToCart={handleAddToCart}
166     />
167   </section>
168 </main>
169 </div>
170 );
171 }
172
173 export default App;
```

File: src/App.css



App.css

```
1 * {
2   box-sizing: border-box;
3   margin: 0;
4   padding: 0;
5 }
6
7 body {
8   font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
9   line-height: 1.6;
10  color: #333;
11  background-color: #f8f9fa;
12 }
13
14 .App {
15   min-height: 100vh;
16 }
17
18 .App-main {
19   max-width: 1200px;
20   margin: 0 auto;
21   padding: 40px 20px;
22 }
23
24 .section {
25   margin-bottom: 60px;
26 }
27
28 .section-header {
29   display: flex;
30   justify-content: space-between;
31   align-items: center;
32   margin-bottom: 30px;
33 }
34
35 .section h2 {
36   color: #333;
37   font-size: 1.8rem;
38   margin: 0;
39 }
40
41 .users-grid {
42   display: grid;
43   grid-template-columns: repeat(auto-fit, minmax(350px, 1fr)).
```

```
43     grid-template-columns: repeat(auto-fit, minmax(50px, 1fr)),
44     gap: 20px;
45 }
46
47 @media (max-width: 768px) {
48   .App-main {
49     padding: 20px 15px;
50   }
51
52   .section-header {
53     flex-direction: column;
54     gap: 15px;
55     align-items: flex-start;
56   }
57
58   .section h2 {
59     font-size: 1.5rem;
60   }
61
62   .users-grid {
63     grid-template-columns: 1fr;
64   }
65 }
```

Langkah 7: Run Aplikasi

Hapus/nonaktifkan kode `import './index.css'` dari file `main.jsx` dan aplikasi terlihat seperti :

Demo Komponen React dengan Props

Pemrograman Web Modern - Pertemuan 3



Manajemen Pengguna (3 users)

+ Tambah User



Ahmad Rizki ahmad@example.com

Admin

Edit

Delete



Sari Dewi sari@example.com

User

Edit

Delete



Budi Santoso budi@example.com

Moderator

Edit

Delete

Katalog Produk

+ Tambah Produk

Daftar Produk (4 items)

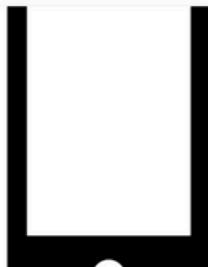


ELECTRONICS

Laptop ASUS VivoBook

Rp 8.500.000

Tambah ke Keranjang



ELECTRONICS

Smartphone Samsung A54

Rp 4.200.000

Stok Habis

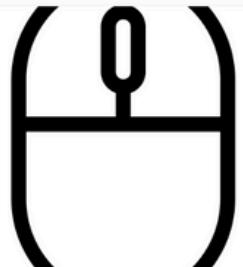


BOOKS

Buku Pemrograman React

Rp 150.000

Tambah ke Keranjang



ELECTRONICS

Mouse Wireless Logitech

Rp 350.000

Tambah ke Keranjang