

```

1  import React, { useState } from 'react';
2
3  function ProductCatalog() {
4      const [formData, setFormData] = useState({
5          name: '',
6          email: '',
7          password: ''
8      });
9      const [isRegistered, setIsRegistered] = useState(false);
10
11     const handleChange = (e) => {
12         setFormData({
13             ...formData,
14             [e.target.name]: e.target.value
15         });
16     };
17
18     const handleSubmit = (e) => {
19         e.preventDefault();
20         if (formData.name && formData.email && formData.password) {
21             setIsRegistered(true);
22         } else {
23             alert('Please fill out all fields');
24         }
25     };
26
27     return (
28         <div>
29             {isRegistered ? (
30                 <h2>Welcome, {formData.name}</h2>
31             ) : (
32                 <form onSubmit={handleSubmit}>
33                     <div>
34                         <label>Name: </label>
35                         <input
36                             type="text"
37                             name="name"
38                             value={formData.name}
39                             onChange={handleChange}
40                             required
41                         />
42                     </div>
43                     <div>
44                         <label>Email: </label>
45                         <input
46                             type="email"
47                             name="email"
48                             value={formData.email}
49                             onChange={handleChange}
50                             required
51                         />
52                     </div>
53                     <div>
54                         <label>Password: </label>
55                         <input
56                             type="password"
57                             name="password"
58                             value={formData.password}
59                             onChange={handleChange}
60                             required
61                         />
62                     </div>
63                     <button type="submit">Register</button>
64                 </form>
65             )}
66         </div>
67     );
68 }
69
70 export default ProductCatalog;
71

```

```

1  import React, { useState } from 'react';
2
3
4  function Login() {
5      const [formData, setFormData] = useState({
6          username: '',
7          password: ''
8      });
9      const [isLoggedIn, setIsLoggedIn] = useState(false);
10
11     const handleChange = (e) => {
12         setFormData({
13             ...formData,
14             [e.target.name]: e.target.value
15         });
16     };
17
18     const handleSubmit = (e) => {
19         e.preventDefault();
20         if (formData.username && formData.password) {
21             setIsLoggedIn(true);
22         } else {
23             alert('Please enter your username and password');
24         }
25     };
26
27     return (
28         <div>
29             {isLoggedIn ? (
30                 <h2>Welcome back, {formData.username}!</h2>
31             ) : (
32                 <form onSubmit={handleSubmit}>
33                     <div>
34                         <label>Username: </label>
35                         <input
36                             type="text"
37                             name="username"
38                             value={formData.username}
39                             onChange={handleChange}
40                             required
41                         />
42                     </div>
43                     <div>
44                         <label>Password: </label>
45                         <input
46                             type="password"
47                             name="password"
48                             value={formData.password}
49                             onChange={handleChange}
50                             required
51                         />
52                     </div>
53                     <button type="submit">Login</button>
54                 </form>
55             )}
56         </div>
57     );
58 }
59
60 export default Login;
61

```



```
1  import React, { useState } from 'react';
2
3  function ProductCatalog() {
4    const [products, setProducts] = useState([]);
5    const [productName, setProductName] = useState('');
6
7    const handleAddProduct = (e) => {
8      e.preventDefault();
9      if (productName) {
10        setProducts([...products, productName]);
11        setProductName(''); // Clear the input field after adding
12      } else {
13        alert('Please enter a product name');
14      }
15    };
16
17    const handleDeleteProduct = (index) => {
18      const newProducts = [...products];
19      newProducts.splice(index, 1); // Remove product by index
20      setProducts(newProducts);
21    };
22
23    return (
24      <div>
25        <h1>Product List</h1>
26        <form onSubmit={handleAddProduct}>
27          <input
28            type="text"
29            value={productName}
30            onChange={(e) => setProductName(e.target.value)}
31            placeholder="Enter product name"
32            required
33          />
34          <button type="submit">Add Product</button>
35        </form>
36
37        <ul>
38          {products.map((product, index) => (
39            <li key={index}>
40              {product}
41              <button onClick={() => handleDeleteProduct(index)}>Delete</button>
42            </li>
43          ))}
44        </ul>
45      </div>
46    );
47  }
48
49  export default ProductCatalog;
50
```