

# PRAKTIK PER. 5

## Langkah 1: Setup Project

`npm create vite@latest praktik-5 -- --template react`

## Langkah 2: Komponen Event Handling Demo

File: `src/components/EventDemo.jsx`

```
1 import React, { useState } from 'react';
2
3 const EventDemo = () => {
4   const [message, setMessage] = useState('');
5   const [position, setPosition] = useState({ x: 0, y: 0 });
6   const [keyInfo, setKeyInfo] = useState('');
7
8   // Click Events
9   const handleClick = () => {
10     setMessage('Tombo! diklik!');
11   };
12
13   const handleDoubleClick = () => {
14     setMessage('Double click terdeteksi!');
15   };
16
17   // Mouse Events
18   const handleMouseMove = (event) => {
19     setPosition({
20       x: event.clientX,
21       y: event.clientY
22     });
23   };
24
25   const handleMouseEnter = () => {
26     setMessage('Mouse masuk area!');
27   };
28
29   const handleMouseLeave = () => {
30     setMessage('Mouse keluar area!');
31   };
32
33   // Keyboard Events
34   const handleKeyDown = (event) => {
35     setKeyInfo(`Key: ${event.key}, Code: ${event.code}`);
36   };
37
38   const handleKeyUp = () => {
39     setTimeout(() => setKeyInfo(''), 1000);
40   };
41
42   // Context Menu
43   const handleContextMenu = (event) => {
44     event.preventDefault();
45     setMessage('Context menu dicegah!');
46   };
47
48   return (
49     <div className="event-demo">
```

```

50     <h2>Demo Penanganan Event</h2>
51
52     {/* Button Events */}
53     <div className="button-group">
54         <button onClick={handleClick} className="btn btn-primary">
55             Klik Saya
56         </button>
57
58         <button onDoubleClick={handleDoubleClick} className="btn btn-
59 secondary">
60             Double Klik Saya
61         </button>
62
63         <button onContextMenu={handleContextMenu} className="btn btn-
64 warning">
65             Right Click Saya
66         </button>
67     </div>
68
69     {/* Mouse Area */}
70     <div
71         className="mouse-area"
72         onMouseMove={handleMouseMove}
73         onMouseEnter={handleMouseEnter}
74         onMouseLeave={handleMouseLeave}
75     >
76         <h3>Area Interaksi Mouse</h3>
77         <p>Gerakkan mouse di area ini</p>
78         <p>Posisi: X: {position.x}, Y: {position.y}</p>
79     </div>
80
81     {/* Keyboard Input */}
82     <div className="keyboard-demo">
83         <h3>Demo Keyboard Events</h3>
84         <input
85             type="text"
86             placeholder="Ketik sesuatu di sini..."
87             onKeyDown={handleKeyDown}
88             onKeyUp={handleKeyUp}
89             className="keyboard-input"
90         />
91         {keyInfo && <p className="key-info">{keyInfo}</p>}
92     </div>
93
94     {/* Message Display */}
95     {message && (
96         <div className="message-box">
97             {message}
98         </div>
99     )}
100 </div>
101 );

```

```
102 export default EventDemo;
```

## Langkah 3: Komponen Form Handling Demo

File: src/components/FormDemo.jsx

```
1 import React, { useState } from 'react';
2
3 const FormDemo = () => {
4   const [formData, setFormData] = useState({
5     nama: '',
6     email: '',
7     password: '',
8     usia: '',
9     jurusan: '',
10    semester: '1',
11    newsletter: false,
12    gender: ''
13  });
14
15  const [errors, setErrors] = useState({});
16  const [isSubmitted, setIsSubmitted] = useState(false);
17  const [touched, setTouched] = useState({});
18
19  // Handle Input Change
20  const handleChange = (event) => {
21    const { name, value, type, checked } = event.target;
22
23    setFormData(prevData => ({
24      ...prevData,
25      [name]: type === 'checkbox' ? checked : value
26    }));
27
28    // Clear error ketika user mulai mengetik
29    if (errors[name]) {
30      setErrors(prevErrors => ({
31        ...prevErrors,
32        [name]: ''
33      }));
34    }
35  };
36
37  // Handle Blur (ketika input kehilangan fokus)
38  const handleBlur = (event) => {
39    const { name } = event.target;
40    setTouched(prevTouched => ({
41      ...prevTouched,
42      [name]: true
43    }));
44  };
45
46  // Validasi Form
47  const validateForm = () => {
48    const newErrors = {};
```

```

50 // Validasi Nama
51 if (!formData.nama.trim()) {
52     newErrors.nama = 'Nama lengkap harus diisi';
53 } else if (formData.nama.trim().length < 2) {
54     newErrors.nama = 'Nama minimal 2 karakter';
55 }
56
57 // Validasi Email
58 if (!formData.email) {
59     newErrors.email = 'Email harus diisi';
60 } else if (!/\S+@\S+\.\S+/.test(formData.email)) {
61     newErrors.email = 'Format email tidak valid';
62 }
63
64 // Validasi Password
65 if (!formData.password) {
66     newErrors.password = 'Password harus diisi';
67 } else if (formData.password.length < 6) {
68     newErrors.password = 'Password minimal 6 karakter';
69 }
70
71 // Validasi Usia
72 if (!formData.usia) {
73     newErrors.usia = 'Usia harus diisi';
74 } else if (formData.usia < 17 || formData.usia > 60) {
75     newErrors.usia = 'Usia harus antara 17 - 60 tahun';
76 }
77
78 // Validasi Jurusan
79 if (!formData.jurusan) {
80     newErrors.jurusan = 'Jurusan harus dipilih';
81 }
82
83 // Validasi Gender
84 if (!formData.gender) {
85     newErrors.gender = 'Jenis kelamin harus dipilih';
86 }
87
88 setErrors(newErrors);
89 return Object.keys(newErrors).length === 0;
90 };
91
92 // Handle Form Submit
93 const handleSubmit = (event) => {
94     event.preventDefault();
95
96     if (validateForm()) {
97         console.log('Data form berhasil:', formData);
98         setIsSubmitted(true);
99         setTimeout(() => {
100             setIsSubmitted(false);
101         }, 3000);
102     }
103 };

```

```
104
105 // Reset Form
106 const handleReset = () => {
107   setFormData({
108     nama: '',
109     email: '',
110     password: '',
111     usia: '',
112     jurusan: '',
113     semester: '1',
114     newsletter: false,
115     gender: ''
116   });
117   setErrors({});
118   setTouched({});
119 };
120
121 // Check jika field memiliki error dan sudah di-touch
122 const hasError = (fieldName) => {
123   return errors[fieldName] && touched[fieldName];
124 };
```



```

1
2   return (
3     <div className="form-demo">
4       <h2>Demo Form Handling</h2>
5
6       {isSubmitted && (
7         <div className="success-message">
8           Form berhasil dikirim! Data sudah tersimpan.
9         </div>
10      )}
11
12     <form onSubmit={handleSubmit} onReset={handleReset}
13     className="form-container">
14       {/* Nama Lengkap */}
15       <div className="form-group">
16         <label htmlFor="nama" className="form-label">
17           Nama Lengkap *
18         </label>
19         <input
20           type="text"
21           id="nama"
22           name="nama"
23           value={formData.nama}
24           onChange={handleChange}
25           onBlur={handleBlur}
26           className={`form-input ${hasError('nama') ? 'error' :
27             ''}}`
28           placeholder="Masukkan nama lengkap"
29           />
30         {hasError('nama') && <span className="error-text">
31           {errors.nama}</span>}
32       </div>
33
34       {/* Email */}
35       <div className="form-group">
36         <label htmlFor="email" className="form-label">
37           Email *
38         </label>
39         <input
40           type="email"
41           id="email"
42           name="email"
43           value={formData.email}
44           onChange={handleChange}
45           onBlur={handleBlur}
46           className={`form-input ${hasError('email') ? 'error' :
47             ''}}`
48           placeholder="contoh@email.com"
49           />

```



```

46         {hasError('email') && <span className="error-text">
{errors.email}</span>}
47     </div>
48
49     {/* Password */}
50     <div className="form-group">
51         <label htmlFor="password" className="form-label">
52             Password *
53         </label>
54         <input
55             type="password"
56             id="password"
57             name="password"
58             value={formData.password}
59             onChange={handleChange}
60             onBlur={handleBlur}
61             className={`form-input ${hasError('password') ? 'error'
: ''}`}
62             placeholder="Minimal 6 karakter"
63         />
64         {hasError('password') && <span className="error-text">
{errors.password}</span>}
65     </div>
66
67     {/* Usia */}
68     <div className="form-group">
69         <label htmlFor="usia" className="form-label">
70             Usia *
71         </label>
72         <input
73             type="number"
74             id="usia"
75             name="usia"
76             value={formData.usia}
77             onChange={handleChange}
78             onBlur={handleBlur}
79             className={`form-input ${hasError('usia') ? 'error' :
''}`}
80             placeholder="17 - 60"
81             min="17"
82             max="60"
83         />
84         {hasError('usia') && <span className="error-text">
{errors.usia}</span>}
85     </div>

```

```

1
2      {/* Gender */}
3      <div className="form-group">
4          <label className="form-label">Jenis Kelamin *</label>
5          <div className="radio-group">
6              <label className="radio-label">
7                  <input
8                      type="radio"
9                      name="gender"
10                     value="Laki-laki"
11                     checked={formData.gender === 'Laki-laki'}
12                     onChange={handleChange}
13                 />
14                 Laki-laki
15             </label>
16             <label className="radio-label">
17                 <input
18                     type="radio"
19                     name="gender"
20                     value="Perempuan"
21                     checked={formData.gender === 'Perempuan'}
22                     onChange={handleChange}
23                 />
24                 Perempuan
25             </label>
26         </div>
27         {hasError('gender') && <span className="error-text">
{errors.gender}</span>}
28     </div>
29
30     {/* Jurusan */}
31     <div className="form-group">
32         <label htmlFor="jurusan" className="form-label">
33             Jurusan *
34         </label>
35         <select
36             id="jurusan"
37             name="jurusan"
38             value={formData.jurusan}
39             onChange={handleChange}
40             onBlur={handleBlur}
41             className={`form-select ${hasError('jurusan') ? 'error'
: ''}`}
42         >
43             <option value="">Pilih Jurusan</option>
44             <option value="Teknik Informatika">Teknik
Informatika</option>
45             <option value="Sistem Informasi">Sistem
Informasi</option>

```

```

46         <option value="Teknik Komputer">Teknik
Komputer</option>
47         <option value="Bisnis Digital">Bisnis Digital</option>
48     </select>
49     {hasError('jurusan') && <span className="error-text">
{errors.jurusan}</span>}
50 </div>
51
52 {/* Semester */}
53 <div className="form-group">
54     <label htmlFor="semester" className="form-label">
Semester
55     </label>
56     <select
57         id="semester"
58         name="semester"
59         value={formData.semester}
60         onChange={handleChange}
61         className="form-select"
62     >
63         {[1, 2, 3, 4, 5, 6, 7, 8].map(sem => (
64             <option key={sem} value={sem.toString()}>
Semester {sem}
65             </option>
66         ))}
67     </select>
68 </div>
69
70 {/* Newsletter */}
71 <div className="form-group checkbox-group">
72     <label className="checkbox-label">
73         <input
74             type="checkbox"
75             name="newsletter"
76             checked={formData.newsletter}
77             onChange={handleChange}
78         />
79         Saya ingin berlangganan newsletter
80     </label>
81 </div>
82
83 {/* Form Buttons */}
84 <div className="form-buttons">
85     <button type="submit" className="btn btn-success">
Daftar
86     </button>
87     <button type="reset" className="btn btn-secondary">
Reset
88     </button>
89 </div>
90 </form>
91
92 {/* Form Data Preview */}
93 <div className="data-preview">

```

```

98         <h3>Preview Data Form:</h3>
99         <pre>{JSON.stringify(formData, null, 2)}</pre>
100     </div>
101 </div>
102 );
103 };
104
105 export default FormDemo;

```

## Langkah 4: App.jsx

```

app.jsx

1  import React from 'react';
2  import './App.css';
3  import EventDemo from './components/EventDemo';
4  import FormDemo from './components/FormDemo';
5
6  function App() {
7      return (
8          <div className="App">
9              <h1>Praktik Penanganan Event dan Form - Pertemuan
10             </h1>
11             <EventDemo />
12             <FormDemo />
13             </div>
14         );
15     }
16     export default App;

```

App.css

```
1  .App {
2    max-width: 1200px;
3    margin: 0 auto;
4    padding: 20px;
5    font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
6  }
7
8  /* Event Demo Styles */
9  .event-demo {
10   background: #f8f9fa;
11   padding: 20px;
12   border-radius: 10px;
13   margin-bottom: 30px;
14   border-left: 4px solid #007bff;
15 }
16
17 .button-group {
18   display: flex;
19   gap: 10px;
20   margin: 20px 0;
21   flex-wrap: wrap;
22 }
23
24 .btn {
25   padding: 10px 20px;
26   border: none;
27   border-radius: 5px;
28   cursor: pointer;
29   font-weight: bold;
30   transition: all 0.3s ease;
31 }
32
33 .btn-primary {
34   background: #007bff;
35   color: white;
36 }
37
38 .btn-secondary {
39   background: #6c757d;
40   color: white;
41 }
42
```

```
43 .btn-warning {
44     background: #ffc107;
45     color: black;
46 }
47
48 .btn-success {
49     background: #28a745;
50     color: white;
51 }
52
53 .btn:hover {
54     opacity: 0.9;
55     transform: translateY(-2px);
56 }
57
58 .mouse-area {
59     background: #e9ecef;
60     padding: 20px;
61     border-radius: 8px;
62     margin: 20px 0;
63     border: 2px dashed #dee2e6;
64     text-align: center;
65 }
66
67 .keyboard-demo {
68     margin: 20px 0;
69 }
70
71 .keyboard-input {
72     width: 100%;
73     max-width: 400px;
74     padding: 10px;
75     border: 2px solid #dee2e6;
76     border-radius: 5px;
77     font-size: 16px;
78 }
79
80 .key-info {
81     background: #d1ecf1;
82     padding: 10px;
83     border-radius: 5px;
84     margin-top: 10px;
85 }
86
87 .message-box {
88     background: #d4edda;
89     color: #155724;
90     padding: 15px;
```



```
90     padding: 10px;
91     border-radius: 5px;
92     margin: 15px 0;
93     border: 1px solid #c3e6cb;
94 }
95
96 /* Form Demo Styles */
97 .form-demo {
98     background: #fff;
99     padding: 20px;
100    border-radius: 10px;
101    border: 1px solid #dee2e6;
102    box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
103 }
104
105 .form-container {
106     display: grid;
107     gap: 20px;
108     margin-bottom: 30px;
109 }
110
111 .form-group {
112     display: flex;
113     flex-direction: column;
114 }
115
116 .form-label {
117     font-weight: bold;
118     margin-bottom: 5px;
119     color: #495057;
120 }
121
122 .form-input,
123 .form-select {
124     padding: 12px;
125     border: 2px solid #e9ecef;
126     border-radius: 5px;
127     font-size: 16px;
128     transition: border-color 0.3s ease;
129 }
130
131 .form-input:focus,
132 .form-select:focus {
133     outline: none;
134     border-color: #007bff;
135 }
136
137 .form-input.error,
```



```
138 .form-select.error {
139   border-color: #dc3545;
140 }
141
142 .error-text {
143   color: #dc3545;
144   font-size: 14px;
145   margin-top: 5px;
146 }
147
148 .radio-group {
149   display: flex;
150   gap: 20px;
151   margin-top: 5px;
152 }
153
154 .radio-label,
155 .checkbox-label {
156   display: flex;
157   align-items: center;
158   gap: 8px;
159   cursor: pointer;
160 }
161
162 .checkbox-group {
163   margin-top: 10px;
164 }
165
166 .form-buttons {
167   display: flex;
168   gap: 10px;
169   margin-top: 20px;
170 }
171
172 .success-message {
173   background: #d4edda;
174   color: #155724;
175   padding: 15px;
176   border-radius: 5px;
177   margin-bottom: 20px;
178   border: 1px solid #c3e6cb;
179   text-align: center;
180   font-weight: bold;
181 }
182
183 .data-preview {
184   background: #f8f9fa;
185   padding: 15px;
```

```
185 padding: 15px;
186 border-radius: 5px;
187 margin-top: 20px;
188 }
189
190 .data-preview pre {
191   background: #e9ecef;
192   padding: 15px;
193   border-radius: 5px;
194   overflow-x: auto;
195   font-size: 14px;
196 }
197
198 /* Responsive Design */
199 @media (max-width: 768px) {
200   .button-group {
201     flex-direction: column;
202   }
203
204   .form-buttons {
205     flex-direction: column;
206   }
207
208   .radio-group {
209     flex-direction: column;
210     gap: 10px;
211   }
212 }
```

Hasil

# Praktik Penanganan Event dan Form - Pertemuan 5

## Demo Penanganan Event

- Klik Saya
- Double Klik Saya
- Right Click Saya

Area Interaksi Mouse

Gerakkan mouse di area ini

Posisi: X: 432, Y: 433

## Demo Keyboard Events

Ketik sesuatu di sini...

Mouse masuk area!

## Demo Form Handling

Nama Lengkap \*

Insan

Email \*

insan@gmail.com

Password \*

.....

Usia \*

17

Jenis Kelamin \*

☒ Laki-laki

☐ Perempuan

Jurusan \*

Teknik Informatika