

# Exercise (Instructions): Controlled Forms

## Objectives and Outcomes

In this exercise you will learn about using controlled components to design controlled forms in your React application. At the end of this exercise you will be able to:

- Design a controlled form in your React application.

## Importing the Necessary Components

- You will start out by importing the necessary components from reactstrap into *ContactComponent.js* as follows:

```
1  . . .
2
3  import React, { Component } from 'react';
4  import { Breadcrumb, BreadcrumbItem,
5         Button, Form, FormGroup, Label, Input, Col } from 'reactstrap';
6
7  . . .
```

- You will then change the *ContactComponent* to a class-based component as follows:

```
1  . . .
2
3  class Contact extends Component {
4
5    render() {
6
7      . . .
8
9    }
10
11 }
```

## Creating the Controlled Form

- Update the *ContactComponent.js* file as follows to set up the Controlled Form:

```

1  . . .
2
3  constructor(props) {
4      super(props);
5
6      this.state = {
7          firstname: '',
8          lastname: '',
9          telnum: '',
10         email: '',
11         agree: false,
12         contactType: 'Tel.',
13         message: ''
14     };
15
16     this.handleChange = this.handleChange.bind(this);
17     this.handleSubmit = this.handleSubmit.bind(this);
18
19 }
20
21 handleChange(event) {
22     const target = event.target;
23     const value = target.type === 'checkbox' ? target.checked : target.value
24     ;
25     const name = target.name;
26
27     this.setState({
28         [name]: value
29     });
30 }
31
32 handleSubmit(event) {
33     console.log('Current State is: ' + JSON.stringify(this.state));
34     alert('Current State is: ' + JSON.stringify(this.state));
35     event.preventDefault();
36 }
37 . . .
38

```

- Then add the controlled form to it as follows:

```

1  . . .
2
3  <div className="row row-content">
4    <div className="col-12">
5      <h3>Send us your Feedback</h3>
6    </div>
7    <div className="col-12 col-md-9">
8      <Form onSubmit={this.handleSubmit}>
9        <FormGroup row>
10         <Label htmlFor="firstname" md={2}>First Name
11         </Label>
12         <Col md={10}>
13           <Input type="text" id="firstname" name
14             ="firstname"
15             placeholder="First Name"
16             value={this.state.firstname}
17             onChange={this.handleInputChange} />
18         </Col>
19       </FormGroup>
20       <FormGroup row>
21         <Label htmlFor="lastname" md={2}>Last Name
22         </Label>
23         <Col md={10}>
24           <Input type="text" id="lastname" name
25             ="lastname"
26             placeholder="Last Name"
27             value={this.state.lastname}
28             onChange={this.handleInputChange} />
29         </Col>
30       </FormGroup>
31       <FormGroup row>
32         <Label htmlFor="telnum" md={2}>Contact Tel.</Label>
33         <Col md={10}>
34           <Input type="tel" id="telnum" name="telnum"
35             placeholder="Tel. number"
36             value={this.state.telnum}
37             onChange={this.handleInputChange} />
38         </Col>
39       </FormGroup>
40       <FormGroup row>
41         <Label htmlFor="email" md={2}>Email</Label>
42         <Col md={10}>
43           <Input type="email" id="email" name="email"
44             placeholder="Email"
45             value={this.state.email}
46             onChange={this.handleInputChange} />
47         </Col>
48       </FormGroup>
49       <FormGroup row>
50         <Col md={{size: 6, offset: 2}}>
51           <FormGroup check>
52             <Label check>
53               <Input type="checkbox"
54                 name="agree"
55                 checked={this.state.agree}
56                 onChange={this
57                   .handleInputChange} /> {' '}
58               <strong>May we contact you?</strong>
59             </Label>
60           </FormGroup>
61         </Col>
62         <Col md={{size: 3, offset: 1}}>
63           <Input type="select" name="contactType"
64             value={this.state.contactType}
65             onChange={this.handleInputChange}>
66             <option>Tel.</option>
67             <option>Email</option>

```

```

63         </Input>
64     </Col>
65 </FormGroup>
66 <FormGroup row>
67     <Label htmlFor="message" md={2}>Your Feedback
68     </Label>
69     <Col md={10}>
70         <Input type="textarea" id="message" name
71             ="message"
72             rows="12"
73             value={this.state.message}
74             onChange={this.handleInputChange}
75             ></Input>
76     </Col>
77 </FormGroup>
78 <FormGroup row>
79     <Col md={{size: 10, offset: 2}}>
80         <Button type="submit" color="primary">
81             Send Feedback
82         </Button>
83     </Col>
84 </FormGroup>
85 </Form>
86 </div>
87 </div>

```

- Save all changes and do a Git commit with the message "Controlled Forms".

## Conclusions

In this exercise you have learnt to create a controlled form within your React application