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
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.handleInputChange = this.handleInputChange.bind(this);
17          this.handleSubmit = this.handleSubmit.bind(this);
18
19      }
20
21      handleInputChange(event) {
22          const target = event.target;
23          const value = target.type === 'checkbox' ? target.checked : target.value
               ;
24          const name = target.name;
25
26          this.setState({
27              [name]: value
28          });
29      }
30
31      handleSubmit(event) {
```

```
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
                              </Label>
11                           <Col md={10}>
12                               <Input type="text" id="firstname" name
                                 ="firstname"
13                                   placeholder="First Name"
14                                   value={this.state.firstname}
15                                   onChange={this.handleInputChange} />
16                           </Col>
17                       </FormGroup>
18                       <FormGroup row>
19                           <Label htmlFor="lastname" md={2}>Last Name
                              </Label>
20                           <Col md={10}>
21                               <Input type="text" id="lastname" name
                                 ="lastname"
22                                   placeholder="Last Name"
23                                   value={this.state.lastname}
24                                   onChange={this.handleInputChange} />
25                           </Col>
26                       </FormGroup>
27                       <FormGroup row>
28                           <Label htmlFor="telnum" md={2}>Contact Tel.</Label>
29                           <Col md={10}>
30                               <Input type="tel" id="telnum" name="telnum"
31                                   placeholder="Tel. number"
48                           <Label check>
49                               <Input type="checkbox"
```

```
50                              name="agree"
51                              checked={this.state.agree}
52                              onChange={this
                            .handleInputChange} /> {' '}
53                              <strong>May we contact you?</strong>
54                          </Label>
55                      </FormGroup>
56                  </Col>
57                  <Col md={{size: 3, offset: 1}}>
58                      <Input type="select" name="contactType"
59                          value={this.state.contactType}
60                          onChange={this.handleInputChange}>
61                          <option>Tel.</option>
62                          <option>Email</option>              ~
                    ="message"
70                      rows="12"
71                      value={this.state.message}
72                      onChange={this.handleInputChange}
                        ></Input>
73                  </Col>
74              </FormGroup>
75              <FormGroup row>
76                  <Col md={{size: 10, offset: 2}}>
77                      <Button type="submit" color="primary">
78                          Send Feedback
79                      </Button>
80                  </Col>
81              </FormGroup>
82          </Form>
83      </div>
84  </div>
85
86  . . .
```

- 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.