### 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:

. . .

import React, { Component } from 'react';

import { Breadcrumb, BreadcrumbItem,

Button, Form, FormGroup, Label, Input, Col } from 'reactstrap';

. . .

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

. . .

class Contact extends Component {

render() {

. . .

}

}

#### Creating the Controlled Form

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

. . .

constructor(props) {

super(props);

this.state = {

firstname: '',

lastname: '',

telnum: '',

email: '',

agree: false,

contactType: 'Tel.',

message: ''

};

this.handleInputChange = this.handleInputChange.bind(this);

this.handleSubmit = this.handleSubmit.bind(this);

}

handleInputChange(event) {

const target = event.target;

const value = target.type === 'checkbox' ? target.checked : target.value;

const name = target.name;

this.setState({

[name]: value

});

}

handleSubmit(event) {

console.log('Current State is: ' + JSON.stringify(this.state));

alert('Current State is: ' + JSON.stringify(this.state));

event.preventDefault();

}

. . .

* Then add the controlled form to it as follows:

. . .

<div className="row row-content">

<div className="col-12">

<h3>Send us your Feedback</h3>

</div>

<div className="col-12 col-md-9">

<Form onSubmit={this.handleSubmit}>

<FormGroup row>

<Label htmlFor="firstname" md={2}>First Name</Label>

<Col md={10}>

<Input type="text" id="firstname" name="firstname"

placeholder="First Name"

value={this.state.firstname}

onChange={this.handleInputChange} />

</Col>

</FormGroup>

<FormGroup row>

<Label htmlFor="lastname" md={2}>Last Name</Label>

<Col md={10}>

<Input type="text" id="lastname" name="lastname"

placeholder="Last Name"

value={this.state.lastname}

onChange={this.handleInputChange} />

</Col>

</FormGroup>

<FormGroup row>

<Label htmlFor="telnum" md={2}>Contact Tel.</Label>

<Col md={10}>

<Input type="tel" id="telnum" name="telnum"

placeholder="Tel. number"

value={this.state.telnum}

onChange={this.handleInputChange} />

</Col>

</FormGroup>

<FormGroup row>

<Label htmlFor="email" md={2}>Email</Label>

<Col md={10}>

<Input type="email" id="email" name="email"

placeholder="Email"

value={this.state.email}

onChange={this.handleInputChange} />

</Col>

</FormGroup>

<FormGroup row>

<Col md={{size: 6, offset: 2}}>

<FormGroup check>

<Label check>

<Input type="checkbox"

name="agree"

checked={this.state.agree}

onChange={this.handleInputChange} /> {' '}

<strong>May we contact you?</strong>

</Label>

</FormGroup>

</Col>

<Col md={{size: 3, offset: 1}}>

<Input type="select" name="contactType"

value={this.state.contactType}

onChange={this.handleInputChange}>

<option>Tel.</option>

<option>Email</option>

</Input>

</Col>

</FormGroup>

<FormGroup row>

<Label htmlFor="message" md={2}>Your Feedback</Label>

<Col md={10}>

<Input type="textarea" id="message" name="message"

rows="12"

value={this.state.message}

onChange={this.handleInputChange}></Input>

</Col>

</FormGroup>

<FormGroup row>

<Col md={{size: 10, offset: 2}}>

<Button type="submit" color="primary">

Send Feedback

</Button>

</Col>

</FormGroup>

</Form>

</div>

</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.