

# Exercise (Instructions): Angular Reactive Forms

## Part 1

### Objectives and Outcomes

In this exercise you will learn about using Angular reactive forms in your Angular application. At the end of this exercise you will be able to:

- Design a reactive form in your Angular application.

### Importing the Reactive Forms Module

- You will start out by importing the `ReactiveFormsModule` from `@angular/forms` into your `AppModule` as follows:

```
1  . . .
2
3  import { ReactiveFormsModule } from '@angular/forms';
4
5  . . .
6
7  @NgModule({
8    . . .
9
10   imports: [
11     . . .
12     ReactiveFormsModule
13   ],
14
15   . . .
```

- You will then create a new file named `feedback.ts` in the shared folder and update its contents as follows:

```
1  export class Feedback {
2    firstname: string;
3    lastname: string;
4    telnum: number;
5    email: string;
6    agree: boolean;
7    contacttype: string;
8    message: string;
9  };
10
11  export const ContactType = ['None', 'Tel', 'Email'];
```

### Creating the Reactive Form

- Open the contact.component.ts file and update it as follows to create the reactive form in the code:

```
1  . . .
2  import { FormBuilder, FormGroup, Validators } from '@angular/forms';
3
4  import { Feedback, ContactType } from '../shared/feedback';
5
6  . . .
7
8  export class ContactComponent implements OnInit {
9
10     feedbackForm: FormGroup;
11     feedback: Feedback;
12     contactType = ContactType;
13
14     constructor(private fb: FormBuilder) {
15         this.createForm();
16     }
17
18     ngOnInit() {
19     }
20
21     createForm() {
22         this.feedbackForm = this.fb.group({
23             firstname: '',
24             lastname: '',
25             telnum: 0,
26             email: '',
27             agree: false,
28             contacttype: 'None',
29             message: ''
30         });
31     }
32
33     onSubmit() {
34         this.feedback = this.feedbackForm.value;
35         console.log(this.feedback);
36         this.feedbackForm.reset();
37     }
38
39 }
```

- Then open contact.component.html and add the reactive form to it as follows:

```

1      <div fxFlex fxFlexOffset="20px" class="form-size">
2          <h3>Send us your Feedback</h3>
3          <p>{{ feedbackForm.value | json }} {{ feedbackForm.status | json }}</p>
4
5          <form novalidate [formGroup]="feedbackForm" (ngSubmit)="onSubmit()">
6              <p>
7                  <md-input-container class="half-width">
8                      <input mdInput formControlName="firstname" placeholder="First
9                          Name" type="text" required>
10                 </md-input-container>
11                 <md-input-container class="half-width">
12                     <input mdInput formControlName="lastname" placeholder="Last Name"
13                         type="text" required>
14                 </md-input-container>
15             </p>
16             <p>
17                 <md-input-container class="half-width">
18                     <input mdInput formControlName="telnum" placeholder="Tel. Number"
19                         type="tel" required>
20                 </md-input-container>
21                 <md-input-container class="half-width">
22                     <input mdInput formControlName="email" placeholder="Email" type
23                         ="email" required>
24                 </md-input-container>
25             </p>
26             <table class="form-size">
27                 <tr>
28                     <td>
29                         <md-slide-toggle formControlName="agree">May we contact you?</md
30                             -slide-toggle>
31                     </td>
32                     <td>
33                         <md-select placeholder="How?" formControlName="contacttype">
34                             <md-option *ngFor="let ctype of contactType" [value]="ctype">
35                                 {{ ctype }}
36                             </md-option>
37                         </md-select>
38                     </td>
39                 </tr>
40             </table>
41             <p>
42                 <md-input-container class="full-width">
43                     <textarea mdInput formControlName="message" placeholder="Your
44                         Feedback" rows=12></textarea>
45                 </md-input-container>
46             </p>
47             <button type="submit" md-button class="background-primary text-floral
48                 -white">Submit</button>
49         </form>
50     </div>

```

- Add the following CSS classes to contact.component.scss file:

```

1  .full-width {
2      width: 95%
3  }
4
5  .half-width {
6      width: 45%
7  }
8
9  .form-size {
10     width: 75%
11 }

```

- Save all changes and do a Git commit with the message "Reactive Forms Part 1".

## Conclusions

In this exercise you have learnt to use the `ReactiveFormsModule` in Angular forms library to create a reactive form within your Angular application.

✓ Complete

