

Angular: Reactive Forms

Getting Started with Reactive Forms



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Version Check



This course was created by using:

- Angular 20



Version Check



This course is 100% applicable to:

- Angular 14+

Mostly applicable to:

- 8+



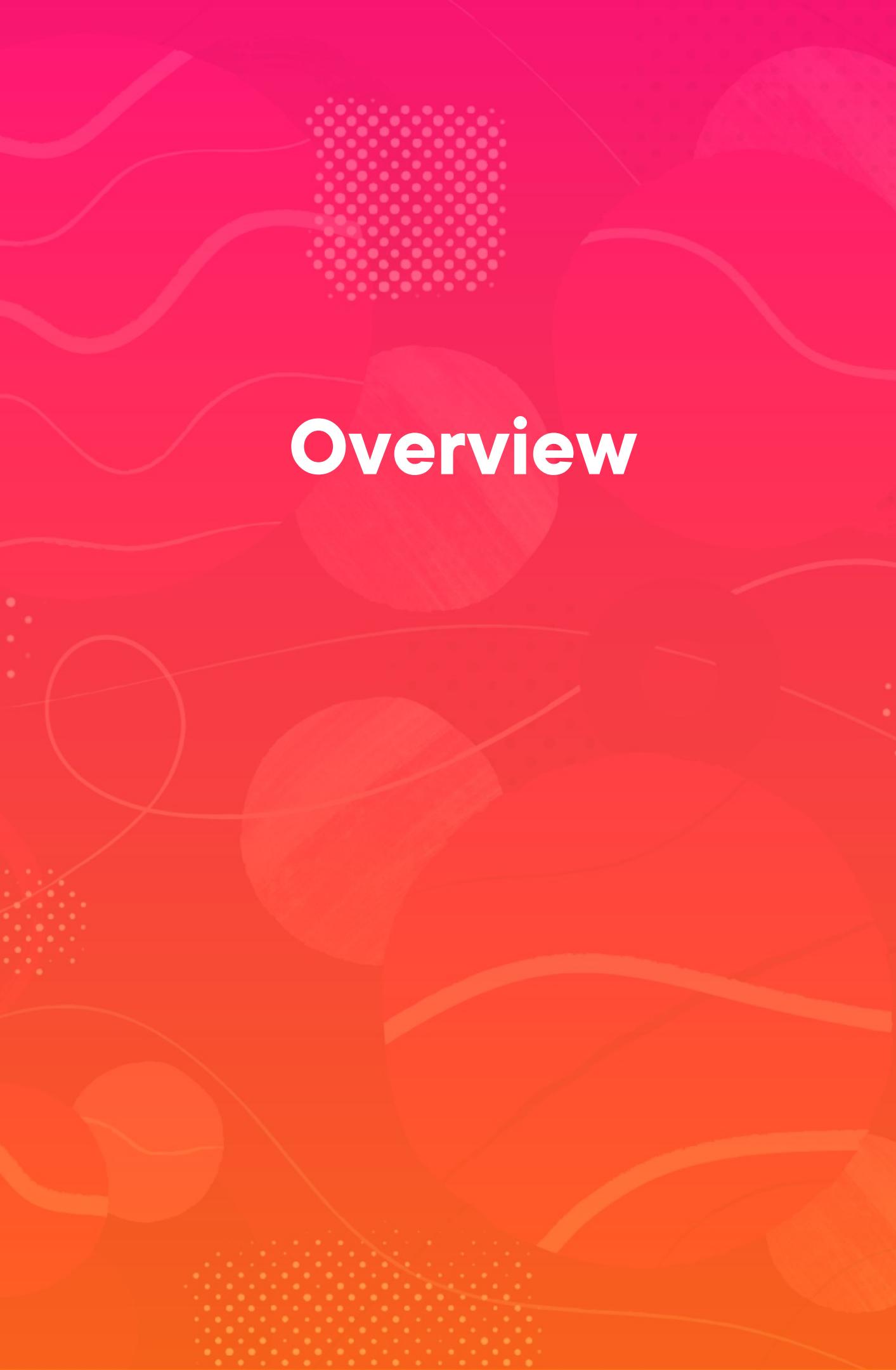
Recommended Prerequisites

Angular Fundamentals

HTML

JavaScript





Overview

- Creating Angular reactive forms
- Working with input elements and data types
- Validating reactive forms
- Creating custom ControlValueAccessors and components
- Dynamically adding form elements
- Reacting to changes



Edit Contact

Name/Info

First Name

Last Name

Title

Phone

Phone



Mobile



Email

Email

Home Work Other

Address



City

State/Region

Zip/Postal Code

Home



Cancel

Save

For each field:
Input Value



Edit Contact

Name/Info

Jim

Cooper

Author

Phone

888-555-1212



Mobile



Email

me@jcoop.io

Home Work Other

Address

123 Main St



Some City

Montana

12345

Work

Cancel

Save

For each field:
Input Value
Validity



Edit Contact

Name/Info

First Name

First Name is Required

Cooper

Author

888-555-1212



Mobile



me@jcoop.io

Home Work Other

123 Main St



Some City

Montana

12345

Work



Cancel

Save

For each field:

- Input Value
- Validity
- Dirty
- Touched



Edit Contact

Name/Info

First Name

First Name is Required

Last Name

Last Name is Required

Title

Title Name is Required

Phone

Phone



Phone Number is Required

Mobile



Email

Email

Email is Required

Home Work Other

Address



Address is Required

City

State/Region

Zip/Postal Code

For each field:

Input Value

Validity

Dirty

Touched



Edit Contact

Name/Info

First Name

First Name is Required

Last Name

Title

Phone



Mobile



Email

Home Work Other

Phone

Address



City

State/Region

Zip/Postal Code

Home



Cancel

Save

For each field:

Input Value

Validity

Dirty

Touched

For the entire form:

Input Values

Validity

Dirty

Touched



Edit Contact

Name/Info

First Name

First Name is Required

Last Name

Title

Phone



Mobile



Email

Home Work Other

Address

Address



City

State/Region

Zip/Postal Code

Home



Cancel

Save

For each field:

Input Value
Validity
Dirty
Touched

For the entire form:

Input Values
Validity
Dirty
Touched



Angular Form Controls

FormControl

First Name

- invalid
- valid
- dirty
- pristine
- touched
- untouched

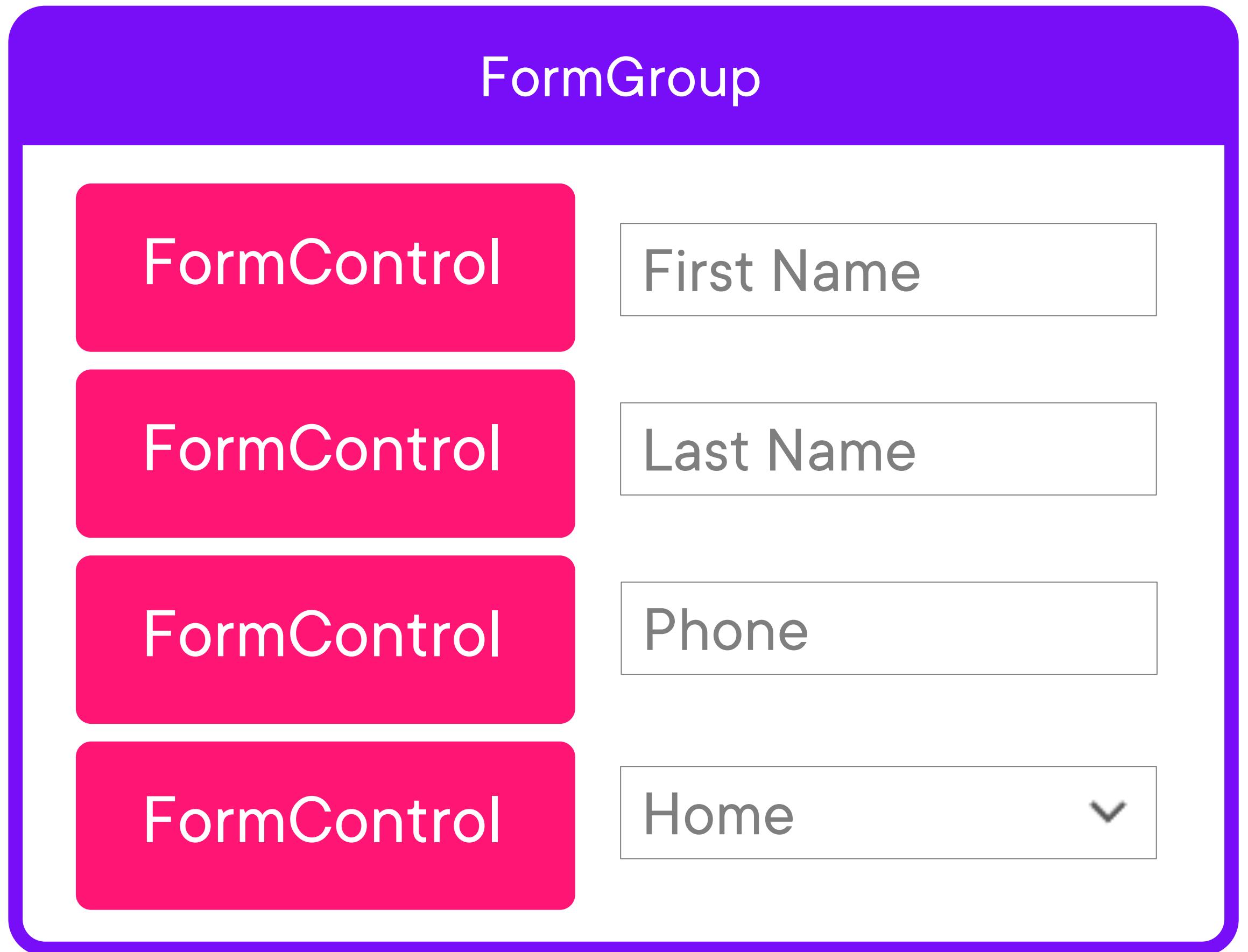
FormGroup

First Name
Last Name
Title
Address
City
State/Region
Zip/Postal Code
Home

- invalid
- valid
- dirty
- pristine
- touched
- untouched



Form Model



Angular Forms Approaches

Template-driven Forms

Reactive Forms



Angular Forms Approaches: Similarities

Template-driven Forms

and

Reactive Forms

FormControl

First Name

- invalid
- valid
- dirty
- pristine
- touched
- untouched

FormGroup

First Name
Last Name
Title
Address
City
State/Region
Zip/Postal Code
Home

- invalid
- valid
- dirty
- pristine
- touched
- untouched



Template-driven Forms

First Name

```
<input  
  type="text"  
  [(ngModel)]="contact.firstName"  
  #firstName=>ngModel"  
>
```

Two-way binding



```
class MyComponent {  
  contact:Contact = {  
    firstName: ''  
    lastName: ''  
  };  
}
```

Reactive Forms

First Name

```
<input  
  type="text"  
  [formControl]="firstName"  
>
```

One-way binding



```
class MyComponent {  
  firstName = new FormControl('');  
}
```



Template-driven Forms

vs

Reactive Forms

HTML template-based

Separate data model

Two-way mutable bindings

Synchronous data flow

Validation with directives

TypeScript/Component-based

Data model managed by form controls

One-way immutable bindings

Asynchronous data flow

Validation with functions



Up Next:

Creating Angular Reactive Forms

