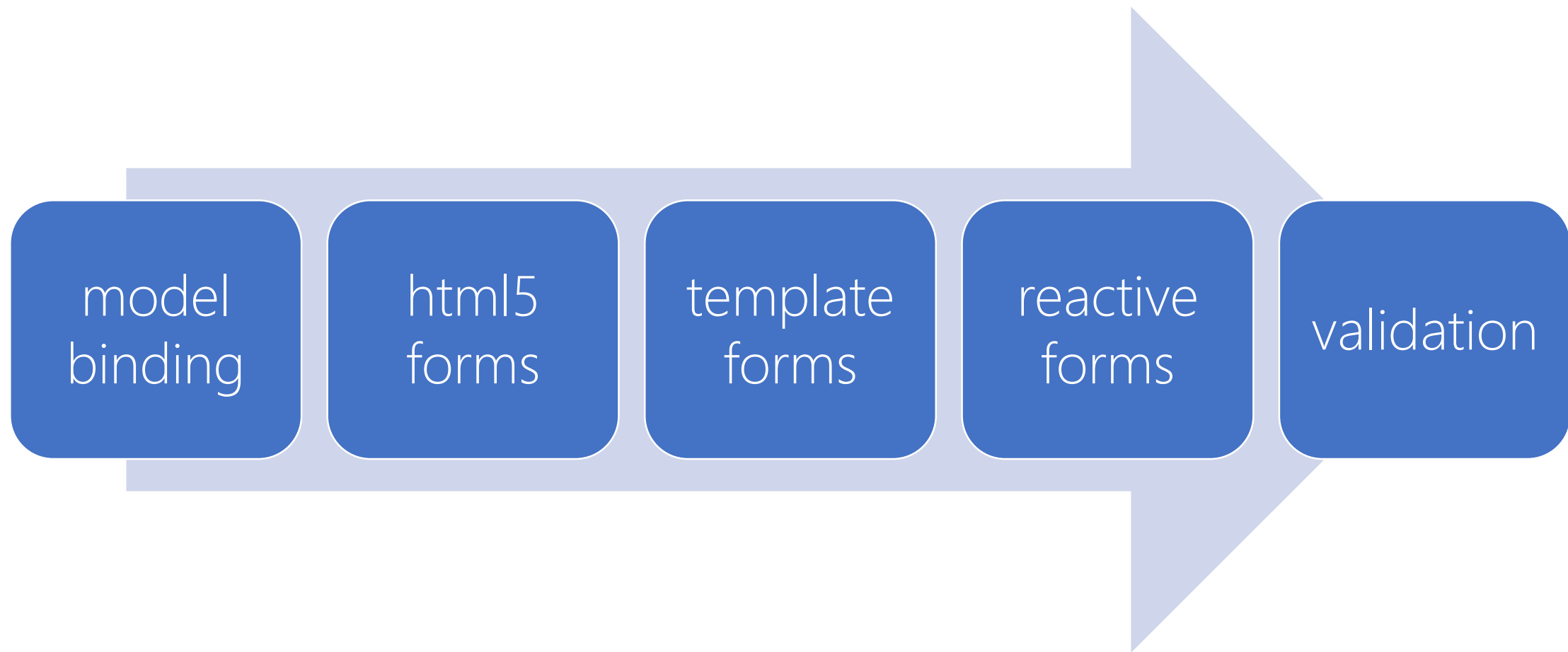




part 4

# plan



Input Label

Input Label

Input Label


Input Label

Input Label

Textarea Label

Placeholder Text

Upload Files



Drag files here  
or [browse your computer](#)

Select Label

Option One

Select Label

Option One

Option Two

Option Three

Option Four

Option Five

Option Six

Check Select Label

Option One, Option Three

Check Select Label

☒ Option One

☐ Option Two

☒ Option Three

☐ Option Four

☐ Option Five

☐ Option Six

Radio Group Label

☐ Option One

☒ Option Two

☐ Option Three

☐ Option Four

Radio Group Label

Mon

Tues

Wed

Thurs

Fri

Checkbox Label

☐ Option One

☒ Option Two

☐ Option Three

☒ Option Four

Checkbox Group Label

Mon

Tues

Wed

Thurs

Fri

Toggle Label

☐ Disabled

☒ Enabled

Toggle Label

\$1,500 \$2,000

Search Address

701

701 6th Ave New York, NY

701 S La Salle St Chicago, IL

701 N Front St Harrisburg, PA

701 Brickell Ave Miami, FL

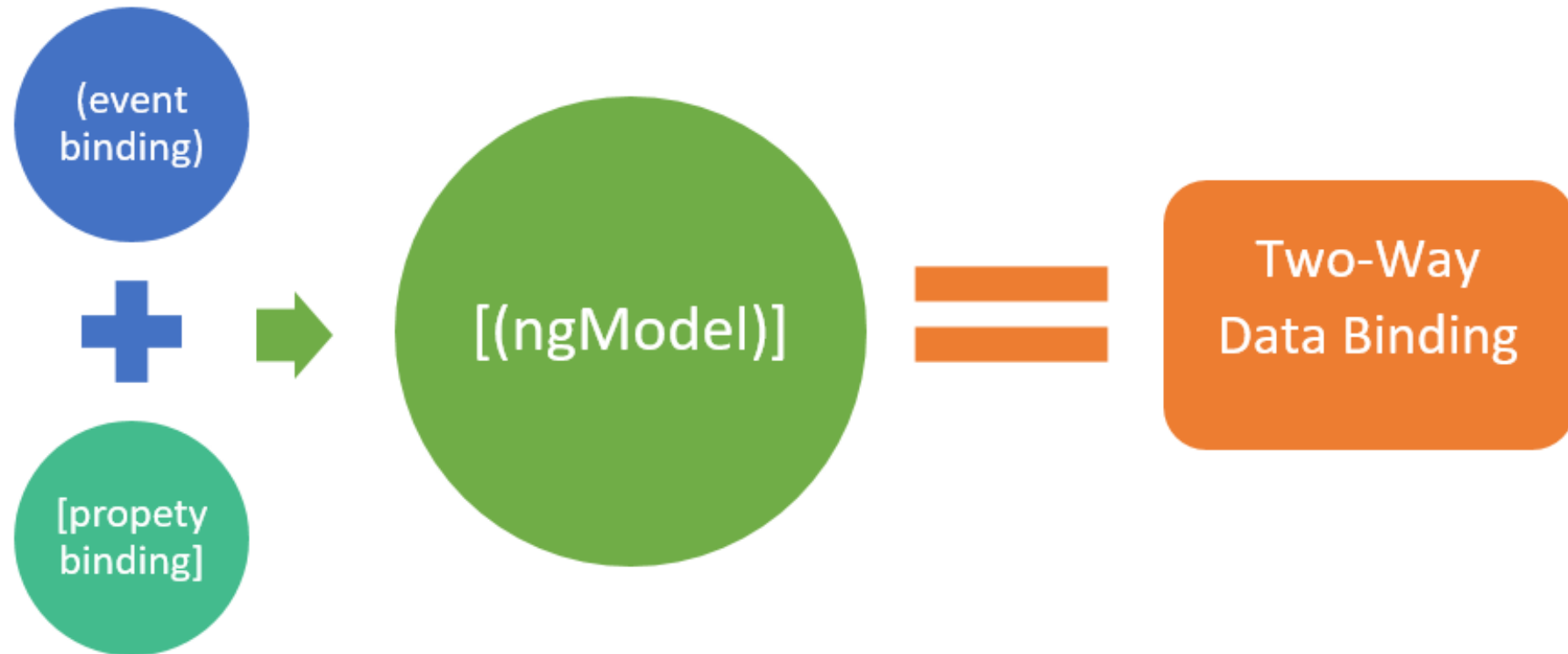
701 S Federal Hwy Fort Lauderdale, FL

701 Macarthur Blvd Oakland, CA

model (data) binding

```
<input type="text" name="title" [(ngModel)]="title" />
```

# model (data) binding



# model (data) binding

Host Element



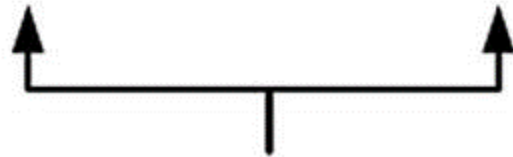
Directive



Expression



`<input [(ngModel)]="selectedProduct">`



Banana in a Box

# model (data) binding

NgModel connects a model property to an input control

NgModel is distributed via the `@angular/forms` package

must be registered with the application module to be used

# model (data) binding

```
import { FormsModule } from '@angular/forms';
```

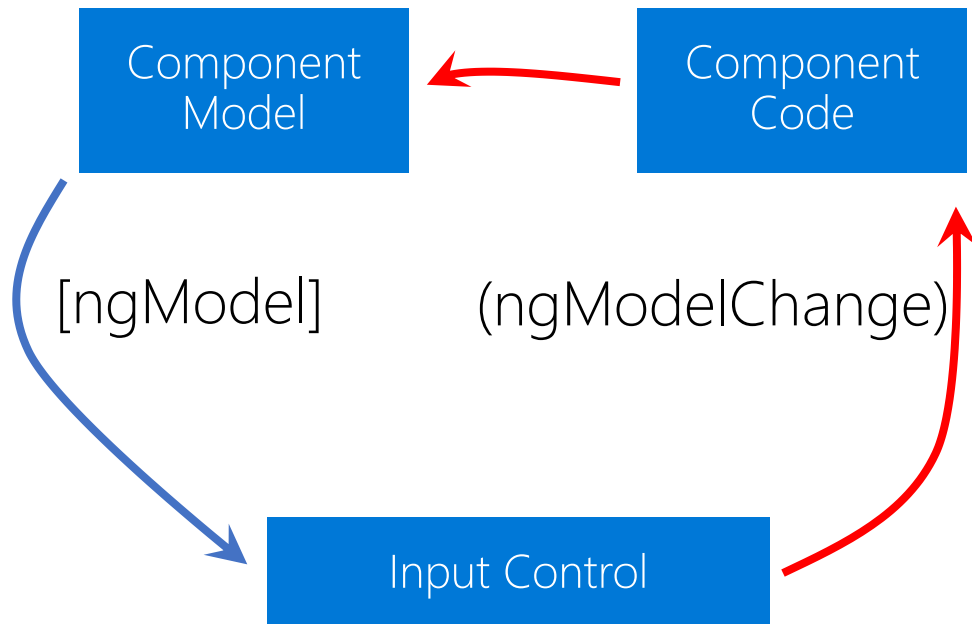
```
@NgModule({  
  declarations: [...],  
  imports: [BrowserModule, FormsModule, ...],  
  exports: [...],  
  providers: [...],  
  bootstrap: [AppComponent]  
})  
export class AppModule { }
```



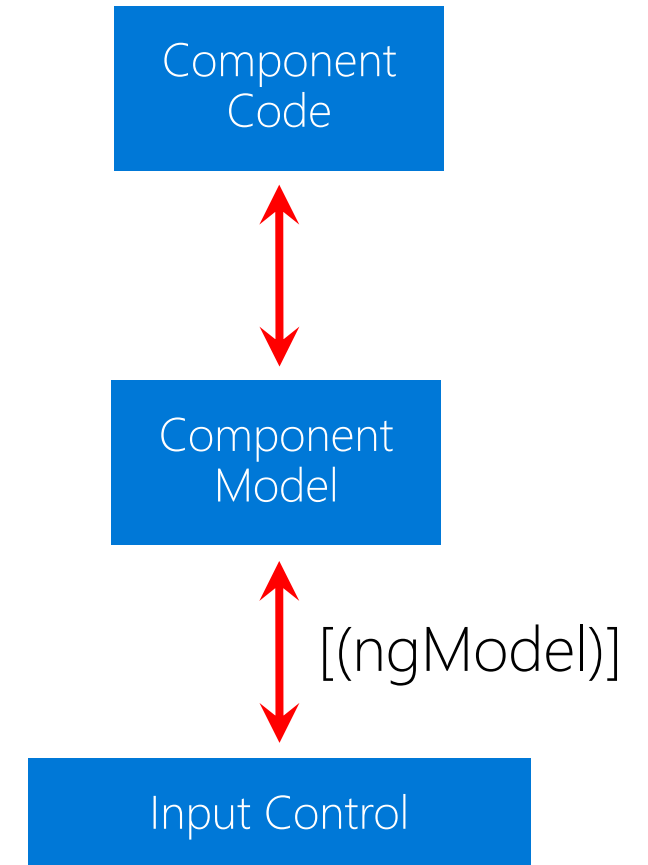
# model binding

```
<input type="text" name="title",  
  [ngModel]="title"  
  (ngModelChange)="title = $event" />
```

# model (data) binding



One-Way Data Binding



Two-Way Data Binding

Facebook pomaga kontaktować się z innymi osobami oraz udostępniać im różne informacje i materiały.



## Rejestracja

To jest (i zawsze będzie) darmowe!

 ! ! !

Data urodzenia

▼

sty

▼

Dlaczego mam podać datę swoich urodzin?



Kobieta

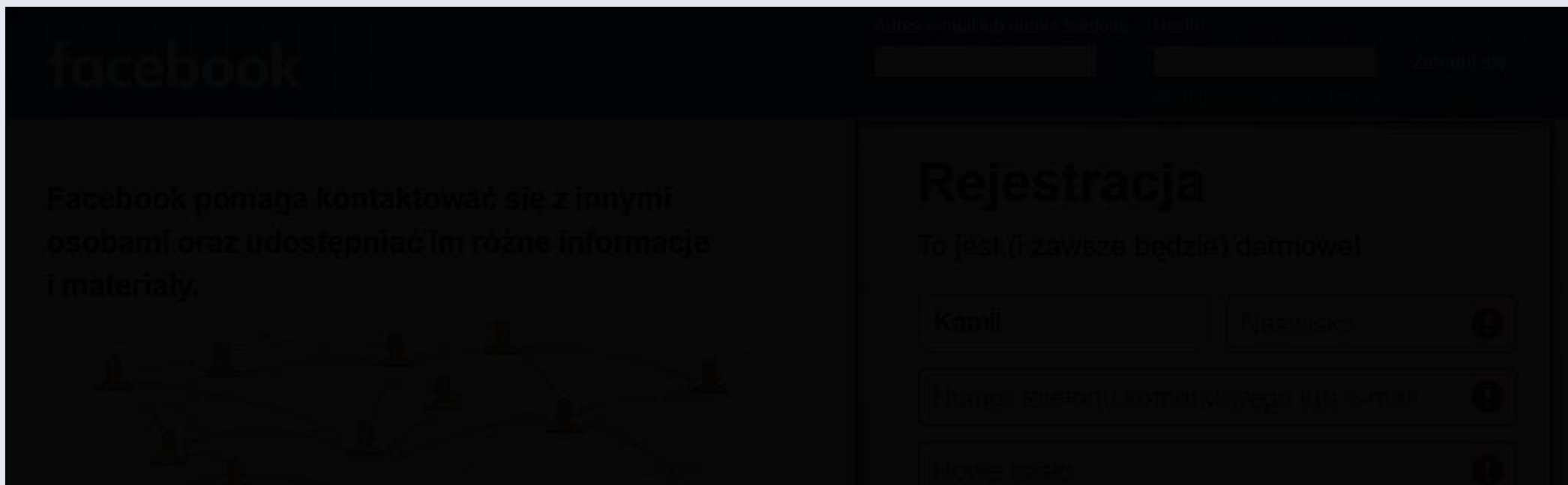


Mężczyzna

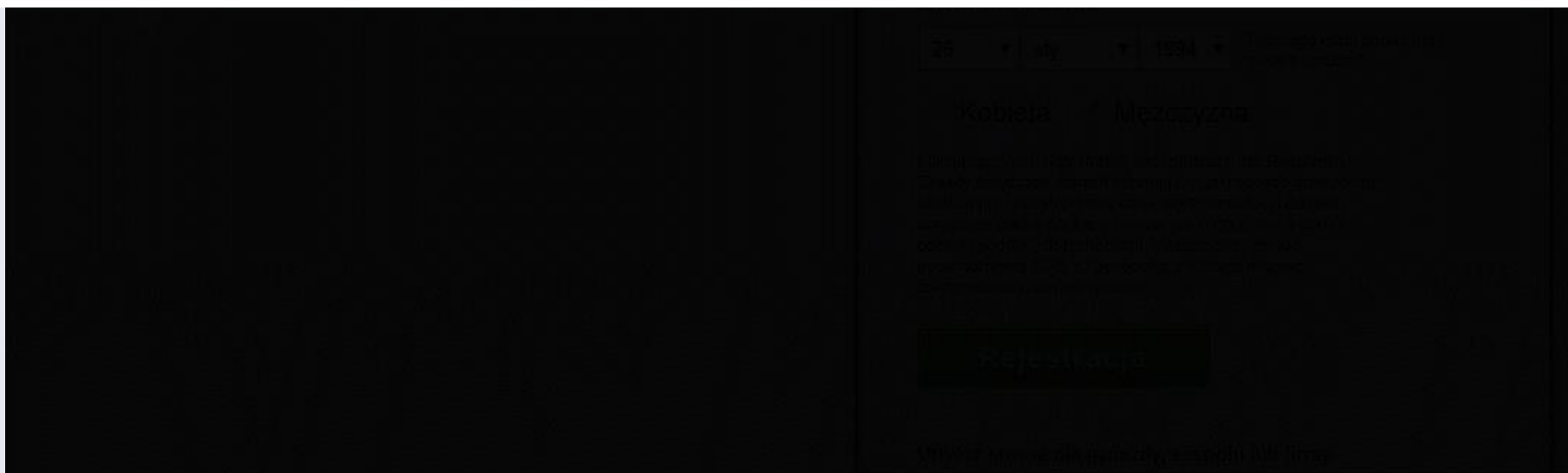
Klikając przycisk Rejestracja, akceptujesz nasz Regulamin. Zasady dotyczące danych informują, w jaki sposób gromadzimy, użytkujemy i udostępniamy dane użytkowników, a Zasady dotyczące plików cookie informują jak korzystamy z plików cookie i podobnych technologii. Możesz otrzymywać powiadomienia SMS z Facebooka, z których możesz zrezygnować w dowolnej chwili.

Rejestracja

Utwórz stronę dla gwiazdy, zespołu lub firmy.



▼<form method="post" id="reg" name="reg" action="https://m.facebook.com/reg/" onsubmit="return false;">



# html5 forms

`<form>`

send request with body (POST)

submit event

value verification = validation

placeholder attribute

## Enter Contact Information

required attribute

input type email

input type tel

Search:

input type search

input type url

input type date

input type number

pattern attribute

input type range

input type color

input type file

Name:

Enter your name

E-Mail:

Phone:

Website:

Birthdate:

Quantity Attending:

Pattern:

123456

Range:

Hair color:

Select photo images:

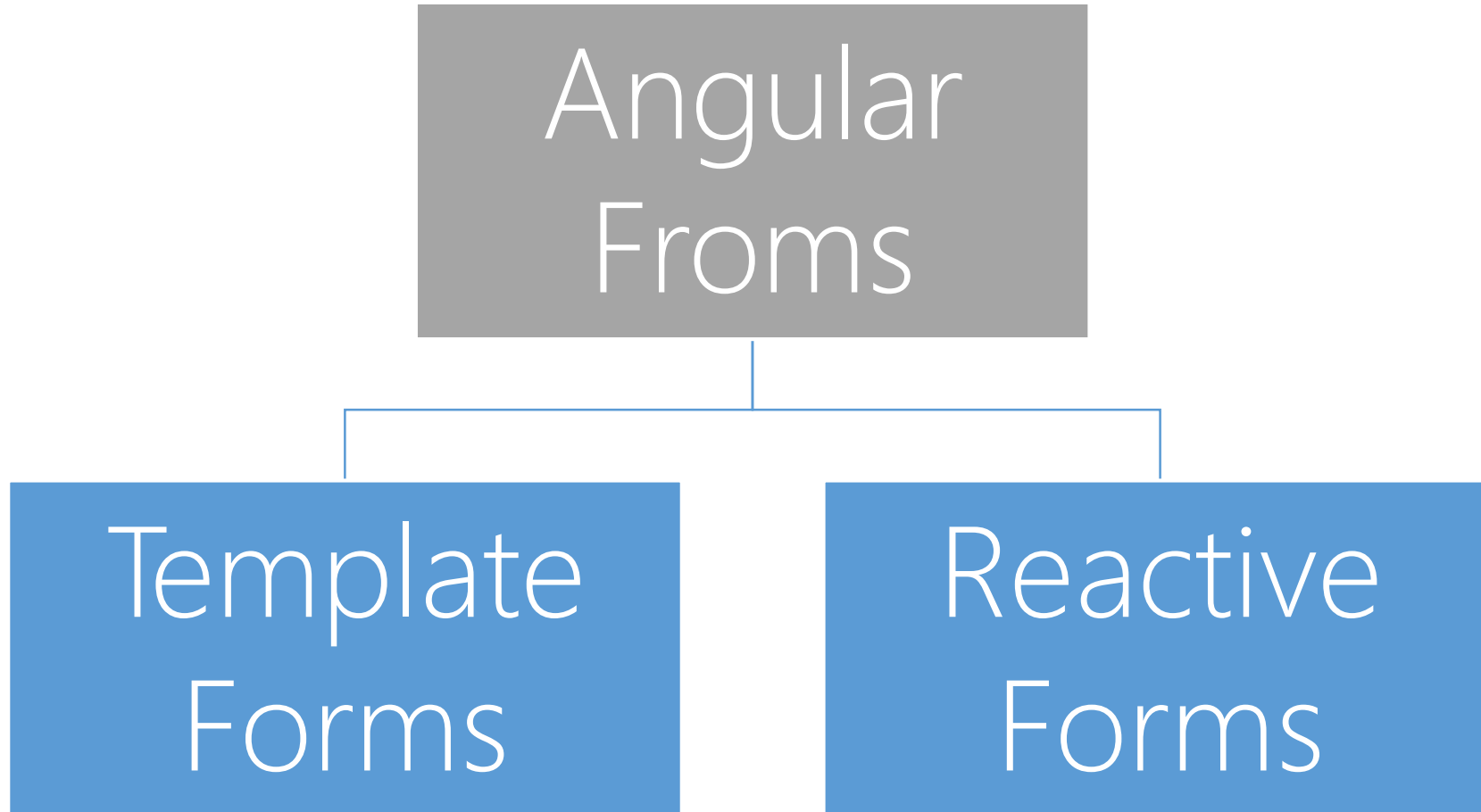
Add files

Submit

# html5 forms

<https://htmlreference.io/forms/>

template forms





# template forms

NgForm

NgModelGroup

NgModel

# template forms

## NgForm, NgModelGroup, NgModel

- connect HTML5 forms to a tree of form control objects and the component model

## the tree of form control objects

- contain information about the form and its controls such as validation state

## the component model

- contains the information entered via the form

# template forms

```
<form novalidate #f="ngForm"
  (ngSubmit)="onSubmit(f)">
<label>
  <span>Full name</span>
  <input type="text"
    placeholder="Your full name"
    name="name" ngModel>
</label>
```

# template forms

...

```
<div ngModelGroup="account">
  <label>
    <span>Email address</span>
    <input type="email" placeholder= "... "
      name="email" ngModel>
  </label>
</div>
<button type="submit">Sign up</button>
</form>
```

# reactive forms

```
import ReactiveFormsModule from @angular/forms
```

manages the data flows

- between form controls and the data model

**FormBuilder** enables forms to be more easily created

data collected does not automatically update the data model

- code must be written to transfer that data to the data model

# reactive forms

FormGroup

FormControl

FormArray

FormBuilder

reactive forms

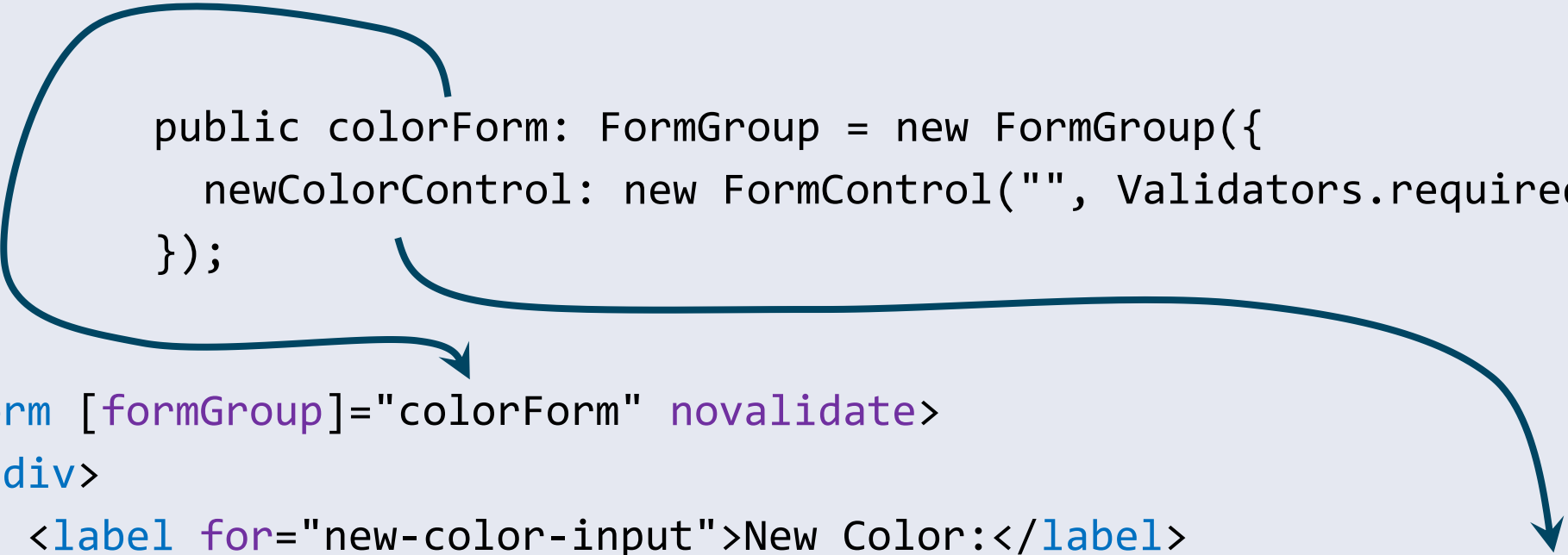
```
public newColorControl: FormControl  
    = new FormControl("", Validators.required);
```



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

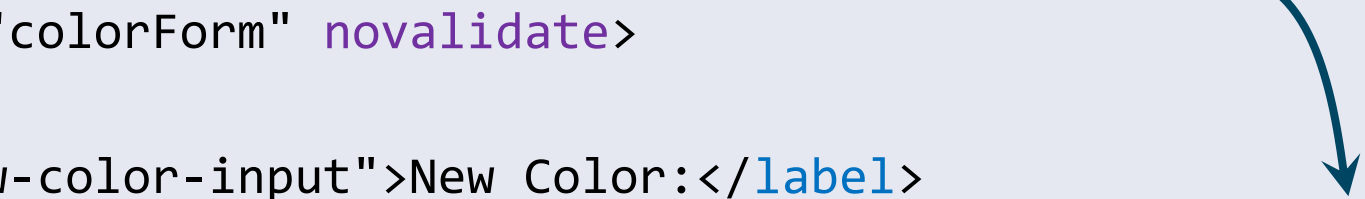
# reactive forms

```
public colorForm: FormGroup = new FormGroup({  
  newColorControl: new FormControl("", Validators.required),  
});
```



A blue curved arrow originates from the `colorForm` property in the TypeScript code and points to the `formGroup` attribute in the HTML template below.

```
<form [formGroup]="colorForm" novalidate>  
  <div>  
    <label for="new-color-input">New Color:</label>  
    <input type="text" id="new-color-input" formControlName="newColorControl">  
  </div>  
</form>
```



A blue curved arrow originates from the `newColorControl` property in the TypeScript code and points to the `formControlName` attribute in the HTML template below.



# reactive forms

## Traditional Approach

```
this.profileForm = new FormGroup({  
  firstNameControl: new FormControl(""),  
  lastNameControl: new FormControl(""),  
});
```

Traditional approach with object hierarchy and parameters

## Form Builder Approach

```
this.profileForm = this.fb.group({  
  firstNameControl: [ "" ],  
  lastNameControl: [ "" ],  
});
```

Form Builder for larger forms

Form Builder uses a simple object literal

# template vs reactive forms

## template forms:

- use a **declarative** approach to configuring Angular forms
- provide a directive, **NgModel**, to connect the component model to the form control
- not available until the second **change detection cycle**
- more familiar to **AngularJS** developers transitioning to Angular

## reactive forms:

- use an **imperative** approach to configuring Angular forms and require a little more work to configure
- do **not directly connect** form controls to the component model
  - additional code is needed to extract the form data
- more familiar to jQuery and React developers
- become more popular

# validation

## Bill To / Billing Address

**Full Name**

John Newman



**Street Address**

2125 Chestnut st



*optional*

**Zip Code**

9412

Enter Zip for City & State The specified ZIP is invalid

**Phone**

|

**Email**

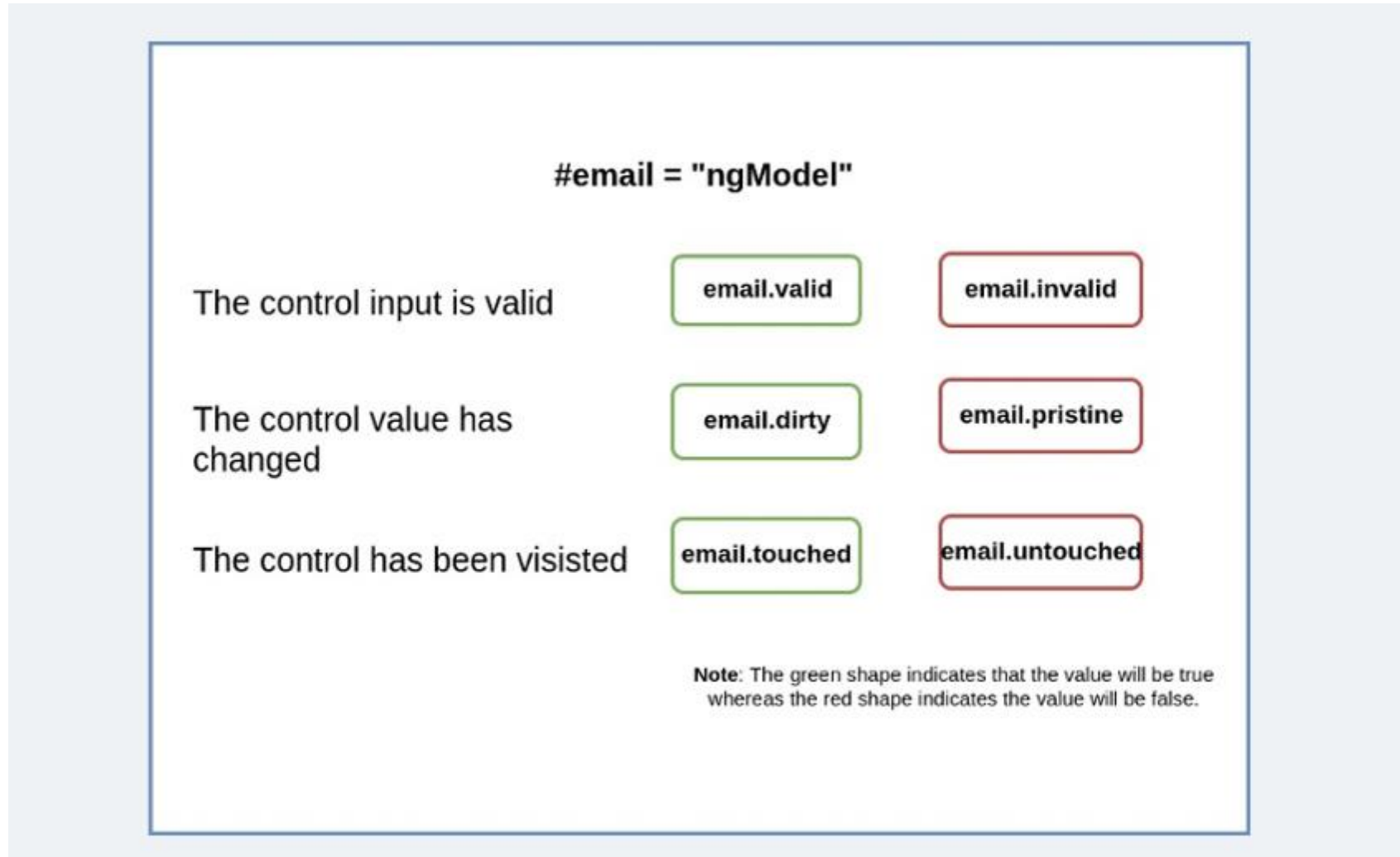
# validation attribute

required	value that must be provided
minlength	minimum number of characters
maxlength	maximum number of characters (cannot be applied directly to form elements because it conflicts with the HTML5 attribute)
pattern	regular expression that the value provided by the user must match.

# validation

```
<input class="form-control"  
      name="name"  
      [(ngModel)]="title"  
      required  
      minlength="5"  
      pattern="^[A-Za-z ]+$" />
```

# validation (control state)



# validation (control state)

Dr IQ	TODO: remove this: form-control ng-untouched ng-pristine ng-valid	Untouched
Dr IQ	TODO: remove this: form-control ng-pristine ng-valid ng-touched	Touched
Dr IQ////	TODO: remove this: form-control ng-valid ng-touched ng-dirty	Changed
	TODO: remove this: form-control ng-touched ng-dirty ng-invalid	Invalid





<https://github.com/Banndzior>

#slack

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