

Angular Forms (Final)

By: Mosh Hamedani

Model-driven forms

First, you need to import both **FormsModule** and **ReactiveFormsModule**:

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

@NgModule({
  imports: [FormsModule, ReactiveFormsModule]
})
```

Then, create a **FormGroup** object in the component:

```
import
  {FormGroup, FormBuilder, Validators}
  from '@angular/forms';

signupForm: FormGroup;

constructor(fb: FormBuilder){
  this.signupForm = fb.group({
    name: ['', Validators.required],
    email: [],
    billing: fb.group({
      cardNumber: ['', Validators.required],
      expiry: ['', Validators.required]
    })
  });
}
```

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In the template:

```
<form [formGroup]="signupForm">
  ...
  <input formControlName="name">
  ...
  <input formControlName="email">
  ...
  <div formGroupName="billing">
    <input formControlName="cardNumber">
    ...
    <input formControlName="expiry">
  </div>
</form>
```

Implementing Custom Validators

```
export class UsernameValidators {
  static cannotContainSpace(control: FormControl) {
    ... // validation logic;

    if (invalid)
      return { cannotContainSpace: true });

    return null;
  }
}
```

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When creating the control using FormBuilder:

```
name: ['', Validators.compose([
  Validators.required,
  UsernameValidators.cannotContainSpace
])]
```

Async Validator

The same as a custom validator, but we return a Promise.

```
static shouldBeUnique(control: Control){
  return new Promise((resolve, reject) => {
    ... // validation logic
    if (invalid)
      resolve({ shouldBeUnique: true });
    else
      resolve(null);
  });
}
```

When building a control using FormBuilder:

```
name: ['',Validators.required, UsernameValidators.shouldBeUnique]
```

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Note the syntax:

```
[defaultValue, customValidators, asyncValidators]
```

When using more than one custom or async validator, we use the **compose** or **composeAsync** methods:

```
[
  defaultValue,
  Validators.compose([v1, v2]),
  Validators.composeAsync([v3, v4])
];
```

To show a loader when an async validator is in progress:

```
<div *ngIf="signupForm.controls.name.pending">
  Checking for uniqueness...
</div>
```