

Step 1: Set Up Angular Project

1. Install Angular CLI (if not already installed):

```
npm install -g @angular/cli
```

2. Create a new Angular project:

```
ng new angular-auth-app  
cd angular-auth-app
```

3. Install Bootstrap 5:

```
npm install bootstrap
```

4. Include Bootstrap in angular.json:

```
"styles": [  
  "node_modules/bootstrap/dist/css/bootstrap.min.css",  
  "src/styles.css"  
]
```

Step 2: Create Standalone Components

1. Generate Login and Register Components:

```
ng generate component login  
ng generate component register
```

2. Modify login.component.ts:

```
import { Component } from '@angular/core';  
import { FormBuilder, FormGroup, Validators, ReactiveFormsModule } from '@angular/forms';  
import { CommonModule } from '@angular/common';  
@Component({  
  selector: 'app-login',  
  templateUrl: './login.component.html',  
  styleUrls: ['./login.component.css'],  
  standalone: true,  
  imports: [CommonModule, ReactiveFormsModule]  
})  
export class LoginComponent {  
  loginForm: FormGroup;  
  constructor(private fb: FormBuilder) {  
    this.loginForm = this.fb.group({
```

```

email: ['', [Validators.required, Validators.email]],
password: ['', [Validators.required, Validators.minLength(6)]],
});
}
onBlur(field: string) {
this.loginForm.get(field)!.markAsTouched();
}
onSubmit() {>
if (this.loginForm.valid) {
console.log(this.loginForm.value);
}
}
}
}

```

3. Modify login.component.html:

```

<div class="container mt-5">
<div class="row justify-content-center">
<div class="col-md-6">
<div class="card">
<div class="card-header text-center">
<h2>Login</h2>
</div>
<div class="card-body">
<form [formGroup]="loginForm" (ngSubmit)="onSubmit()">
<div class="mb-3">
<label for="email" class="form-label">Email address</label>
<input type="email" class="form-control" id="email" formControlName="email"
(blur)="onBlur('email')">
<div *ngIf="loginForm.get('email')!.touched && loginForm.get('email')!.invalid"
class="text-danger">
<small *ngIf="loginForm.get('email')!.errors?.['required']">Email is required.</small>
<small *ngIf="loginForm.get('email')!.errors?.['email']">Email is invalid.</small>
</div>
</div>
<div class="mb-3">
<label for="password" class="form-label">Password</label>
<input type="password" class="form-control" id="password" formControlName="password"
(blur)="onBlur('password')">
<div *ngIf="loginForm.get('password')!.touched && loginForm.get('password')!.invalid"
class="text-danger">
<small *ngIf="loginForm.get('password')!.errors?.['required']">Password is required.</small>
<small *ngIf="loginForm.get('password')!.errors?.['minlength']">Password must be at least 6
characters long.</small>

```

```

</div>
</div>
<div class="d-grid">
  <button type="submit" class="btn btn-primary" [disabled]="loginForm.invalid">Login</button>
</div>
</form>
</div>
</div>
</div>
</div>
</div>

```

4. Modify register.component.ts:

```

import { Component } from '@angular/core';
import { FormBuilder, FormGroup, Validators, ReactiveFormsModule } from '@angular/forms';
import { CommonModule } from '@angular/common';
@Component({
  selector: 'app-register',
  templateUrl: './register.component.html',
  styleUrls: ['./register.component.css'],
  standalone: true,
  imports: [CommonModule, ReactiveFormsModule]
})
export class RegisterComponent {
  registerForm: FormGroup;
  constructor(private fb: FormBuilder) {
    this.registerForm = this.fb.group({
      email: ['', [Validators.required, Validators.email]],
      password: ['', [Validators.required, Validators.minLength(6)]],
      confirmPassword: ['', Validators.required]
    }, { validator: this.passwordMatchValidator });
  }
  passwordMatchValidator(form: FormGroup) {
    return form.get('password')!.value === form.get('confirmPassword')!.value
      ? null : { 'mismatch': true };
  }
  onBlur(field: string) {
    this.registerForm.get(field)!.markAsTouched();
  }
  onSubmit() {
    if (this.registerForm.valid) {
      console.log(this.registerForm.value);
    }
  }
}

```

```
}  
}
```

5. Modify register.component.html:

```
<div class="container mt-5">  
  <div class="row justify-content-center">  
    <div class="col-md-6">  
      <div class="card">  
        <div class="card-header text-center">  
          <h2>Register</h2>  
        </div>  
        <div class="card-body">  
          <form [formGroup]="registerForm" (ngSubmit)="onSubmit()">  
            <div class="mb-3">  
              <label for="email" class="form-label">Email address</label>  
              <input type="email" class="form-control" id="email" formControlName="email"  
                (blur)="onBlur('email')">  
              <div *ngIf="registerForm.get('email')!.touched && registerForm.get('email')!.invalid"  
                class="text-danger">  
                <small *ngIf="registerForm.get('email')!.errors?.['required']">Email is required.</small>  
                <small *ngIf="registerForm.get('email')!.errors?.['email']">Email is invalid.</small>  
              </div>  
            </div>  
            <div class="mb-3">  
              <label for="password" class="form-label">Password</label>  
              <input type="password" class="form-control" id="password" formControlName="password"  
                (blur)="onBlur('password')">  
              <div *ngIf="registerForm.get('password')!.touched && registerForm.get('password')!.invalid"  
                class="text-danger">  
                <small *ngIf="registerForm.get('password')!.errors?.['required']">Password is required.</small>  
                <small *ngIf="registerForm.get('password')!.errors?.['minlength']">Password must be at least 6  
                characters long.</small>  
              </div>  
            </div>  
            <div class="mb-3">  
              <label for="confirmPassword" class="form-label">Confirm Password</label>  
              <input type="password" class="form-control" id="confirmPassword"  
                formControlName="confirmPassword" (blur)="onBlur('confirmPassword')">  
              <div *ngIf="registerForm.get('confirmPassword')!.touched &&  
                registerForm.get('confirmPassword')!.invalid" class="text-danger">  
                <small *ngIf="registerForm.get('confirmPassword')!.errors?.['required']">Confirm Password is  
                required.</small>  
                <small *ngIf="registerForm.errors?.['mismatch']">Passwords do not match.</small>
```

```

</div>
</div>
<div class="d-grid">
  <button type="submit" class="btn btn-primary"
[disabled]="registerForm.invalid">Register</button>
</div>
</form>
</div>
</div>
</div>
</div>
</div>

```

Step 3: Add Routing

1. Modify app-routes.ts:

```

import { Routes } from '@angular/router';
import { LoginComponent } from './login/login.component';
import { RegisterComponent } from './register/register.component';
export const routes: Routes = [
  { path: 'login', component: LoginComponent },
  { path: 'register', component: RegisterComponent },
  { path: '', redirectTo: '/login', pathMatch: 'full' }
];

```

2. Modify app.component.html:

```

<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <div class="container-fluid">
    <a class="navbar-brand" href="#">AuthApp</a>
    <div class="collapse navbar-collapse" id="navbarNav">
      <ul class="navbar-nav">
        <li class="nav-item">
          <a class="nav-link" routerLink="/login">Login</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" routerLink="/register">Register</a>
        </li>
      </ul>
    </div>
  </div>
</nav>
<router-outlet></router-outlet>

```

3. Modify app.component.ts:

```
import { Component } from '@angular/core';
import { CommonModule } from '@angular/common';
import { RouterOutlet, RouterLink } from '@angular/router';
@Component({
  selector: 'app-root',
  standalone: true,
  imports: [CommonModule, RouterOutlet, RouterLink],
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'angular-auth-app';
}
```

4. Modify styles.css file for custom form styles:

```
/* You can add global styles to this file, and also import other style files */
/* src/styles.css */
body {
  background-color: #f8f9fa;
}
.card {
  margin-top: 20px;
  border-radius: 10px;
  box-shadow: 0 4px 8px rgba(0,0,0,0.1);
}
.card-header {
  background-color: #007bff;
  color: white;
  border-radius: 10px 10px 0 0;
}
```

Step 4: Run the Application

ng serve

AuthApp Login Register

Login

Email address

Email is invalid.

Password

Password must be at least 6 characters long.

Login

Create a User Login and Registration forms with validations using Angular 18

AuthApp Login Register

Register

Email address

Email is invalid.

Password

Password must be at least 6 characters long.

Confirm Password

Confirm Password is required.Passwords do not match.

Register

Register form

You now have a basic Angular application with standalone login and register components, using Bootstrap 5 for styling and form validation.