

### ### Project Structure

1. **\*\*Home Component\*\***: This will be the landing page.
2. **\*\*Register Component\*\***: This will contain the registration form.
3. **\*\*Login Component\*\***: This will contain the login form.
4. **\*\*App Routing Module\*\***: This will handle the routing between components.

### ### Step-by-Step Solution

#### #### Step 1: Setting up the Angular Project

1. **\*\*Create a new Angular project\*\***:

```
``bash
ng new angular-form-routing
cd angular-form-routing
``
```

2. **\*\*Install Angular Router\*\*** (If not already included):

```
``bash
ng add @angular/router
``
```

### #### Step 2: Generating Components

Generate the Home, Register, and Login components:

```
``bash
ng generate component home
ng generate component register
ng generate component login
``
```

### #### Step 3: Configuring Routing

Create a routing module `app-routing.module.ts` (if not automatically generated):

```
``typescript
```

```
import { NgModule } from '@angular/core';
```

```
import { RouterModule, Routes } from  
'@angular/router';
```

```
import { HomeComponent } from  
'./home/home.component';
```

```
import { RegisterComponent } from  
'./register/register.component';
```

```
import { LoginComponent } from  
'./login/login.component';
```

```
const routes: Routes = [  
  { path: '', component: HomeComponent },  
  { path: 'register', component: RegisterComponent },  
  { path: 'login', component: LoginComponent }  
];
```

```
@NgModule({  
  imports: [RouterModule.forRoot(routes)],  
  exports: [RouterModule]  
})
```

```
export class AppRoutingModuleModule { }  
...
```

Modify `app.module.ts` to include the routing module:

```
``typescript  
import { NgModule } from '@angular/core';  
import { BrowserModule } from  
'@angular/platform-browser';  
import { AppRoutingModuleModule } from './app-  
routing.module';  
import { AppComponent } from './app.component';  
import { HomeComponent } from  
'./home/home.component';  
import { RegisterComponent } from  
'./register/register.component';  
import { LoginComponent } from  
'./login/login.component';  
import { FormsModule } from '@angular/forms';  
  
@NgModule({
```

```
declarations: [  
  AppComponent,  
  HomeComponent,  
  RegisterComponent,  
  LoginComponent  
],  
imports: [  
  BrowserModule,  
  AppRoutingModule,  
  FormsModule  
],  
providers: [],  
bootstrap: [AppComponent]  
})  
export class AppModule { }  
...
```

#### #### Step 4: Creating HTML Forms

```
**Register Component Template  
(`register.component.html`)**:
```

```
``html
```

```
<h2>Register</h2>
```

```
<form #registerForm="ngForm"  
(ngSubmit)="onRegister(registerForm)">
```

```
  <div>
```

```
    <label for="username">Username:</label>
```

```
    <input type="text" id="username"  
name="username" ngModel required>
```

```
  </div>
```

```
  <div>
```

```
    <label for="email">Email:</label>
```

```
    <input type="email" id="email" name="email"  
ngModel required>
```

```
  </div>
```

```
  <div>
```

```
    <label for="password">Password:</label>
```

```
    <input type="password" id="password"  
name="password" ngModel required>
```

```
  </div>
```

```
<button type="submit"  
[disabled]="registerForm.invalid">Register</button  
>  
  
</form>  
...
```

```
**Register Component Class  
(`register.component.ts`)**:
```

```
``typescript
```

```
import { Component } from '@angular/core';
```

```
@Component({  
  selector: 'app-register',  
  templateUrl: './register.component.html'  
})  
export class RegisterComponent {  
  onRegister(form: any) {  
    if (form.valid) {  
      console.log('User Registration', form.value);  
    }  
  }  
}
```

```
}  
}  
``
```

**\*\*Login Component Template**  
(login.component.html)\*\*:

```
``html  
<h2>Login</h2>  
<form #loginForm="ngForm"  
(ngSubmit)="onLogin(loginForm)">  
  <div>  
    <label for="username">Username:</label>  
    <input type="text" id="username"  
name="username" ngModel required>  
  </div>  
  <div>  
    <label for="password">Password:</label>  
    <input type="password" id="password"  
name="password" ngModel required>  
  </div>
```



```
<button type="submit"  
[disabled]="loginForm.invalid">Login</button>  
</form>  
...
```

**\*\*Login Component Class (`login.component.ts`)\*\*:**

```
``typescript  
import { Component } from '@angular/core';  
  
@Component({  
  selector: 'app-login',  
  templateUrl: './login.component.html'  
})  
export class LoginComponent {  
  onLogin(form: any) {  
    if (form.valid) {  
      console.log('User Login', form.value);  
    }  
  }  
}
```

```

## #### Step 5: Setting up the Home Component

**\*\*Home Component Template**  
(`home.component.html`)\*\*:

```
```html
<h1>Welcome to the Angular Form and Routing
Project</h1>
<a routerLink="/register">Register</a> | <a
routerLink="/login">Login</a>
```
```

## #### Step 6: Adding Navigation

Modify the `app.component.html` to include router-outlet:

```
```html
<nav>
  <a routerLink="/">Home</a> |
```

```
<a routerLink="/register">Register</a> |  
<a routerLink="/login">Login</a>  
</nav>  
<router-outlet></router-outlet>  
``
```

### ### Final Project Files

- \*\*app-routing.module.ts\*\*
- \*\*app.module.ts\*\*
- \*\*home.component.html\*\*
- \*\*home.component.ts\*\*
- \*\*register.component.html\*\*
- \*\*register.component.ts\*\*
- \*\*login.component.html\*\*
- \*\*login.component.ts\*\*
- \*\*app.component.html\*\*
- \*\*app.component.ts\*\*