

Lab Exercise 1: Building a Simple Blog Application with Angular Routing

Objective:

The objective of this lab exercise is to practice implementing routing in Angular by building a simple blog application. Participants will learn how to set up routes, create route components, and navigate between different views.

Requirements:

- Basic understanding of Angular framework.
- Node.js and Angular CLI installed on your system.

Steps:

1. Setup Angular Project:

- Use Angular CLI to create a new Angular project named "SimpleBlogApp".

```
ng new SimpleBlogApp
```

2. Create Components:

- Create the following components using Angular CLI:
 - HomeComponent: Landing page of the blog.
 - BlogListComponent: Display a list of blog posts.
 - BlogDetailComponent: Display details of a specific blog post.
 - NotFoundComponent: Display a 404 page for invalid routes.

```
ng generate component HomeComponent
```

```
ng generate component BlogListComponent
```

```
ng generate component BlogDetailComponent
```

```
ng generate component NotFoundComponent
```

3. Define Routes:

- Define routes in the `app-routes.ts` file to navigate between different components.

4. Implement Components:

- Implement the necessary logic and templates in each component:
 1. HomeComponent: Add a welcome message and links to navigate to other parts of the application.
 2. BlogListComponent: Fetch a list of blog posts and display them.
 3. BlogDetailComponent: Fetch details of a specific blog post based on ID and display them.
 4. NotFoundComponent: Display a 404 message.

5. Update App Component Template:

Update the `app.component.html` template to include the `<router-outlet></router-outlet>` tag where the routed components will be displayed.

6. Testing:

- Run the Angular development server and test the application in the browser.
- `ng serve`
 - Navigate to `http://localhost:4200` to view the application.
 - Test navigation between different routes and ensure the components are displayed correctly.

Conclusion:

By completing this lab exercise, you should have a better understanding of how to implement routing in Angular applications. You have built a simple blog application with multiple views and navigation between them. This exercise provides a practical demonstration of routing concepts in Angular and prepares you for building more complex applications in the future.