

Angular project to read C#/MVC/WebAPI/SQL Server backend

Follow the steps to build the Angular app.

1. Create the project named `*angular-to-webapi*` and include routing
2. In `app.module.ts`:
 - a. Import `FormsModule` and add to appropriate decorator key
 - b. Import `HttpClientModule` and add to appropriate decorator key
3. Create the following folders under the `*app*` folder
 - a. Create a folder named `*model*` under `*app*` folder
 - b. Create a folder named `*service*` under `*app*` folder
 - c. Create a folder named `*user*` under `*app*` folder
4. Generate a `*class*` file named `*user.ts*` in the `*user*` folder
5. Create the class `*User*` in the `*user.ts*` file with the following properties and methods (make sure you export it)
 - a. ID: number;
 - b. UserName: string;
 - c. Password: string;
 - d. FirstName: string;
 - e. LastName: string;
 - f. Phone: string;
 - g. Email: string;
 - h. IsReviewer: boolean;
 - i. IsAdmin: boolean;
 - j. Add a constructor to the `*User*` class that initializes all properties
6. Create the service `*user.service.ts*` in the `*app/service*` folder
7. Add an import and appropriate decorator key for `*user.service.ts*` to `*app.module.ts*`.
8. Make the following changes in `*user.service.ts*`:
 - a. Add an import for `*HttpClient*` from `*@angular/common/http*`
 - b. Add an import for `*Observable*` from `*rxjs/Observable*`
 - c. Add an import for `*User*` from `*app/model/user*` (user relative path!)
 - d. Inject `*UserService*` into the class as `*UserSvc*`
 - e. Create a function in the class named `*list()*` that returns a type of `*Observable<User[]>*`
 - i. In the body of the `*list()*` function, make a call to the `*get(..)*` function of the `*UserSvc*` passing the following url `'http://prs.doudsystems.com/Users/List'`. Return the result of this function call as `*Observable<User[]>*`
 - f. Create another function in the class named `*get(id)*` that takes an id as a parameter and returns a type of `*Observable<User[]>*`
 - i. In the body of the `*get(id)*` function, make a call to the `*get(..)*` function of the `*UserSvc*` passing the following url `'http://prs.doudsystems.com/Users/Get/+id'`. Return the result of this function call as `*Observable<User>*`
9. Generate the `*user-list*` and `*user-detail*` components in the `*user*` folder
10. Make the following changes to the `*user-list.component.ts*` file.

- a. Import the `*UserService*` service
 - b. Import the `*User*` class
 - c. Create a property called `*users*` of type `*User[]*`
 - d. Inject the `*UserService*` into the component as `*UserSvc*`
 - e. In the `ngOnInit()`
 - i. Call the `*list()*` function of the user service and subscribe to the results and place the data returned in the `*users*` property
 - ii. Display the returned data by calling `console.log(this.users)`
11. Make the changes to `*user-list.component.html*` to render the data
 - a. Add one extra column called `*Action*` and put a link to a route to call the `*user-detail.component*` and pass the Id of the user id.
12. Make the following changes to `*app-routing.module.ts*`:
 - a. Import `*user-list.component*` and `*user-detail.component*`
 - b. Add the following to the `*routes*` array:
 - i. On startup, navigate to the `*/users/list*` route
 - ii. On route `*/users/list*`, load the `*UserListComponent*`
 - iii. On route `*/users/detail*`, accept a route parameter named `*id*`, load the `*UserDetailComponent*`
 - iv. On any other route, load the `*UserListComponent*`
13. Make the following changes to the `*user-detail.component.ts*`
 - a. Import `*Router*` and `*ActivatedRoute*` from `@angular/router`
 - b. Import the `*UserService*` service and `*User*` class
 - c. Create a property named `*user*` of type `*User*`
 - d. Inject the `*UserService*` as `*UserSvc*`, `*Router*` as `*router*`, and `*ActivatedRoute*` as `*route*`
 - e. In the `ngOnInit()`
 - i. Create a local variable named `*id*` as a string
 - ii. Get the router parameter `*id*` by calling: `*this.route.params.subscribe(parm => id = params['id'])*`
 - iii. Use the variable `*id*` to make a call `*get(id)*` call to the `UserService` subscribing the result and storing it in the property `*user*`
14. With the data being retrieved by both component
 - a. Modify the `*user-list.component.html*` to display the list of user records
 - i. Include an `*Detail*` link to like to the `/users/detail/:id` via `routerLink`
 - b. Modify the `*user-detail.component.html*` to display the specific user record based on the user clicking the appropriate `*Detail*` link on each user.