MyApp

This project was generated with [Angular CLI](https://github.com/angular/angular-cli) version 18.2.1.

Development server

Run `ng serve` for a dev server. Navigate to `http://localhost:4200/`. The application will automatically reload if you change any of the source files.

Code scaffolding

Run `ng generate component component-name` to generate a new component. You can also use `ng generate directive|pipe|service|class|guard|interface|enum|module`.

Build

Run `ng build` to build the project. The build artifacts will be stored in the `dist/` directory.

Running unit tests

Run `ng test` to execute the unit tests via [Karma](https://karma-runner.github.io).

Running end-to-end tests

Run `ng e2e` to execute the end-to-end tests via a platform of your choice. To use this command, you need to first add a package that implements end-to-end testing capabilities.

Further help

To get more help on the Angular CLI use `ng help` or go check out the [Angular CLI Overview and Command Reference](https://angular.dev/tools/cli) page.

Description

The chat system is designed to facilitate real-time communication among users, grouped within designated channels and groups. This system incorporates a tiered permission structure to accommodate varying levels of administrative control and access:

Super Admin:

- Ultimate control over the entire system.
- Can create or delete any groups and channels.
- Manages user roles and permissions across the system.
- Has oversight of all group activities and can intervene in any group or channel if necessary.

Group Admin:

- Manages specific groups assigned to them.
- Can add or remove users from their groups.
- Responsible for creating and managing channels within their groups.
- Can moderate discussions and manage group-specific settings.

User:

- Basic access level intended for general communication.
- Can join channels and participate in discussions as permitted by their group admin.
- Can view and send messages, share files, and engage in video calls within the channels they have access to.

Installation Instructions

To set up a project on your local system, follow these steps:

- 1. Verify that Node.js is installed on the system.
- 2. Replicate the project repository: `git clone https://github.com/your-repo/s5310537-project.git`
- 3. Go to the project directory: `cd s5310537-project`
- 4. Install Angular CLI globally: `npm install -g @angular/cli`
- 5. Go to the server directory: `cd src/server`
- 6. Install server dependency: `npm install`
- 7. Start server: `node index.js`

Implementation Guidelines

To run the Angular Development Server:

- Start the Angular Development Server: `ng serve --open`
- This command automatically opens `http://localhost:4200/` in the default browser.
- Changing the source file automatically reloads the application.