# How to install the application?

## Required software

* Java 1.8
* Maven 3.3.9
* MySQL 5.7.17 server and MySQL Workbench
* Google Chrome (or another Web Browser)
* NodeJS 6.9.4, NPM 3.10.10 (They’re installed together)
* Angular CLI (can be obtained by running ‘npm install -g @angular/cli’ )

## How to install the required software

### Installing Java

Go to the website (<https://java.com/en/download/>) , download the installer and run it. The project will run on Java 1.8 or newer.

### Installing Maven

* Download Maven from the official website (<https://maven.apache.org/download.cgi>). Version 3.3.9 was used but newer ones work as well
* Extract the downloaded archive
* Add the M2\_HOME and MAVEN\_HOME variables to your environment. Make them point to the path where you just extracted Maven
* Add %M2\_HOME%\bin to your path so you will be able to run maven from the command line

### Installing MySQL

* Download MySQL installer from the website (<https://dev.mysql.com/downloads/installer/>)
* Run the installer and follow the instructions
* When asked chose to install MySQL Workbench alongside with the MySQL server
* To start the MySQL server (on Windows) open the Task Manager, go to the Services tab and look for the MySQL57 process. Right-click that process and select Start

### Installing NodeJS

* Go to <https://nodejs.org/en/> and download the latest version of the installer
* Run the installer and follow the instructions. When asked if you want to install NPM too chose to do so (by default this option is already checked)
* Open a terminal and run “npm install npm -g –upgrade” to update NPM to the latest version
* Run “npm install -g @angular/cli” to also install angular-cli

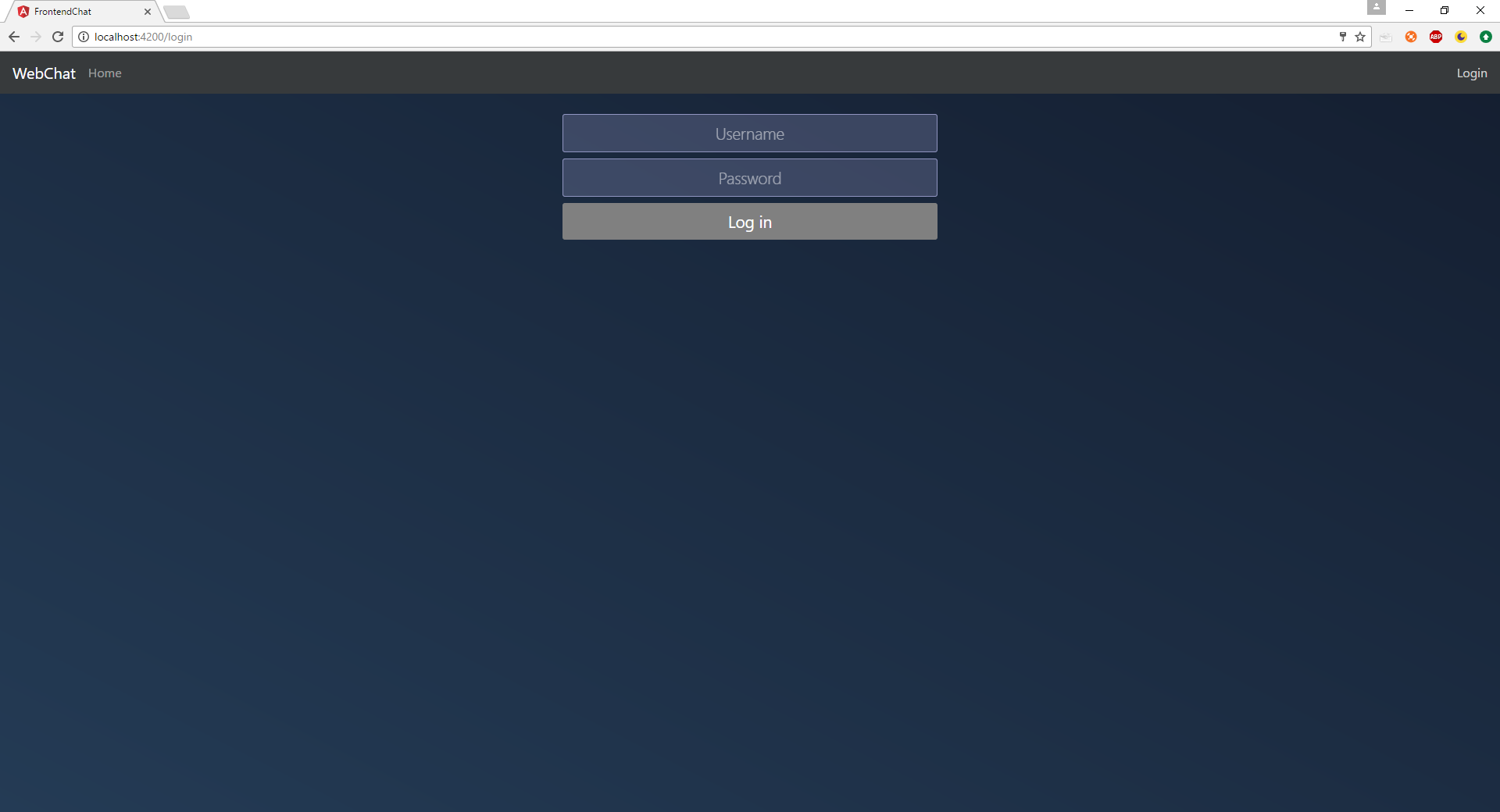
## How to install the application

* Use MySQL Workbench to connect to the MySQL Server
* Run the init.sql initialization script
* Create a new MySQL user with username=”assignment” and password=”softwaredesign” and give this new user full rights on the newly created schema (assignment3)
* Go into the folder containing the backend application of the project (the ‘implementation/backend’ folder) in IntelliJ
* Open a terminal in that folder and run “mvn install”
* Wait for maven to build the project
* Run the newly created jar (it will be created in the /target folder)
* Go into the ‘implementation/frontend’ folder and open a terminal
* Run ‘npm install’ to install the required node modules (they will be installed based on package.json)
* Run the ‘ng serve’ command
* Wait for the front-end application to be ready
* Open a web browser and go to localhost:4200

### If you want the application to be accessible to other computers on the network

* Find out what is the IP address used by your computer
* Go to the network\frontend-chat\src\app\service folder
* In auth.service.ts, edit the value of authUrl by replacing localhost with the IP address
* In http.service.ts, edit the value of baseUrl by replacing localhost with the IP address
* In stomp.service.ts edit the value of url by replacing localhost with the IP address  
  (this has to be done because I can’t know the IP address of the computer where the server will be ran)
* Copy the content of the network folder in the implementation folder and allow the operating system to overwrite the existing files
* Instead of starting the server with “ng serve” start it with “ng serve –host <IP\_ADDRESS>” where <IP\_ADDRESS> is the IP address of your computer

# How to use the application?

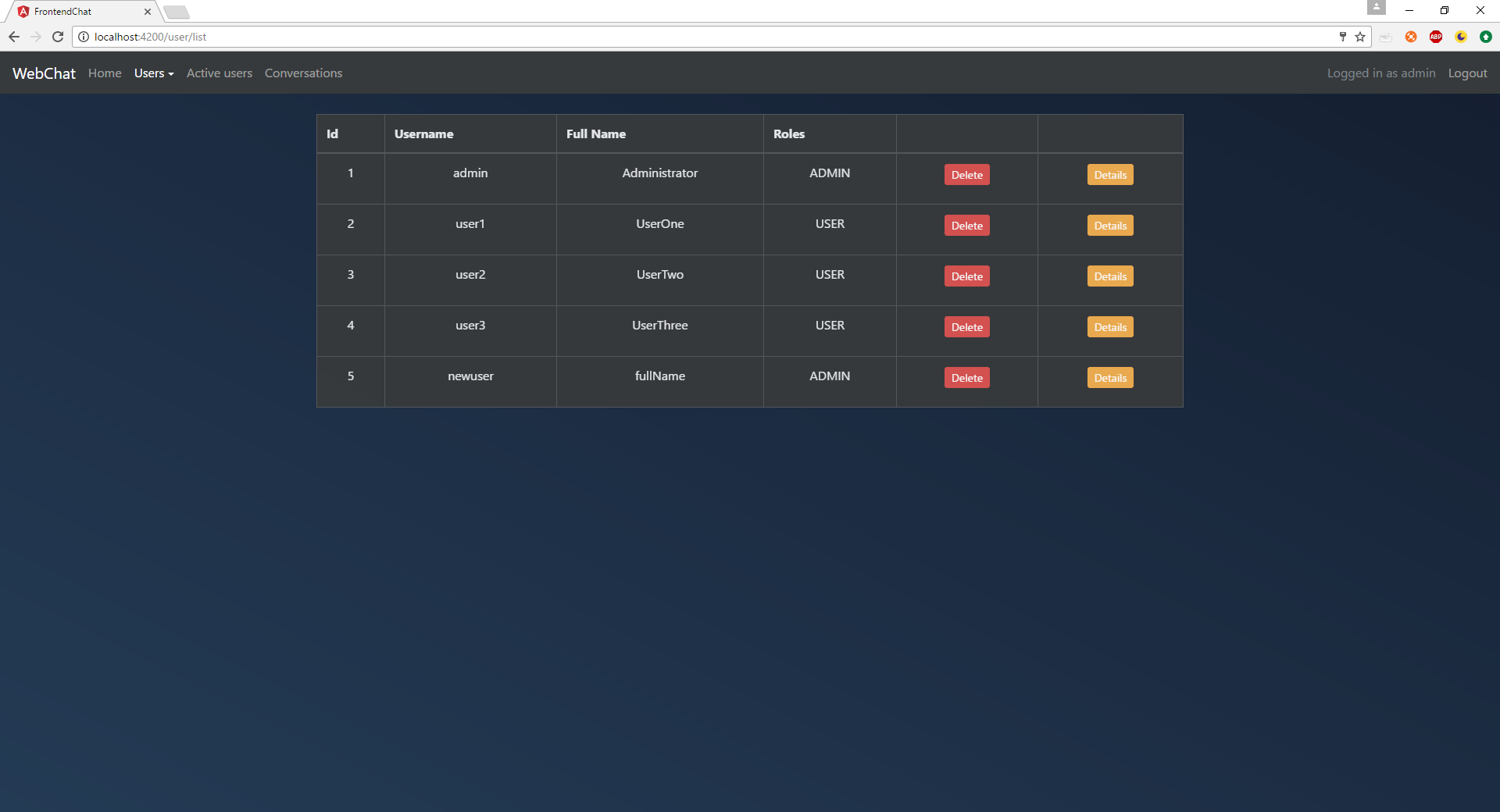
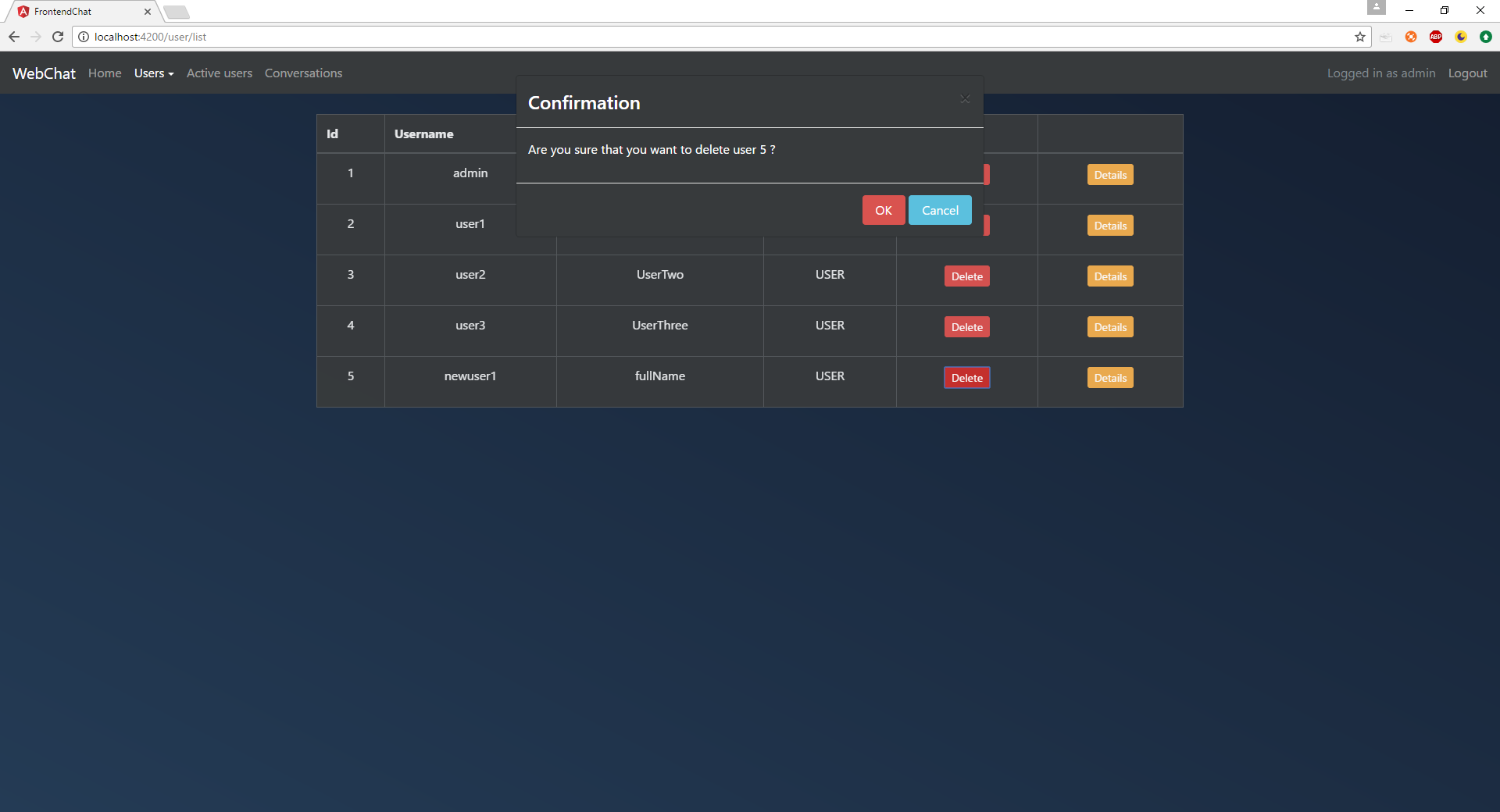
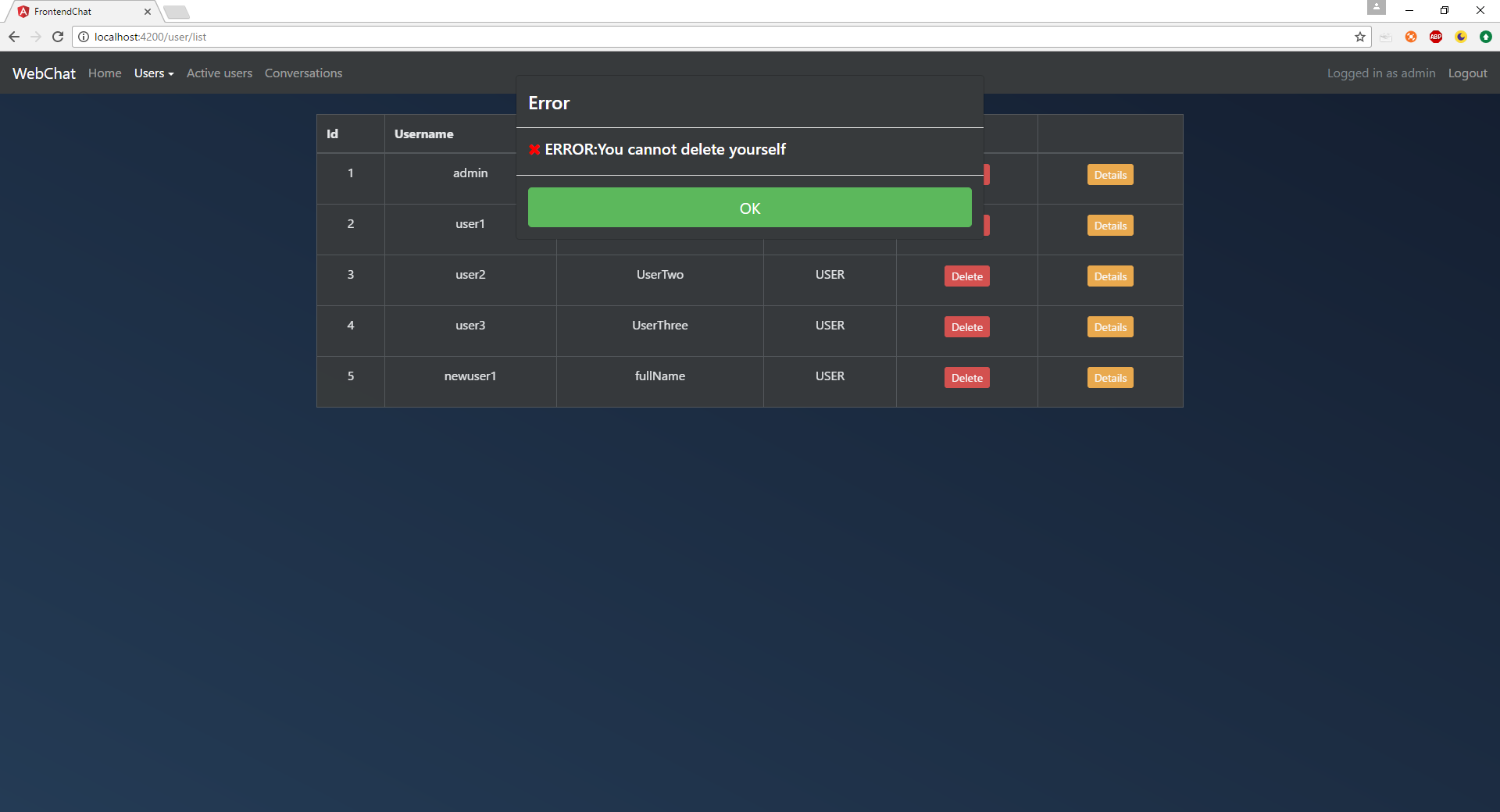
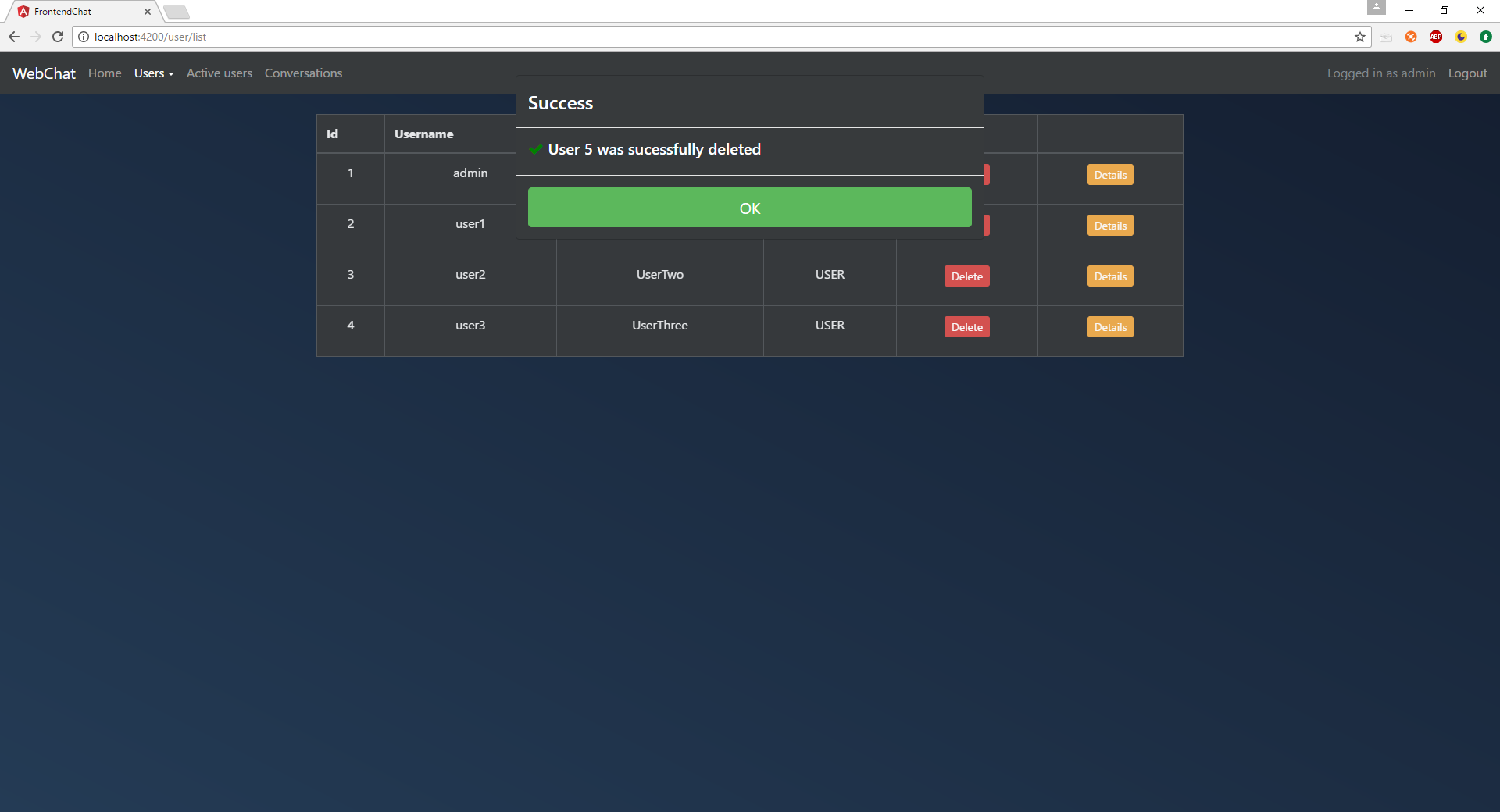
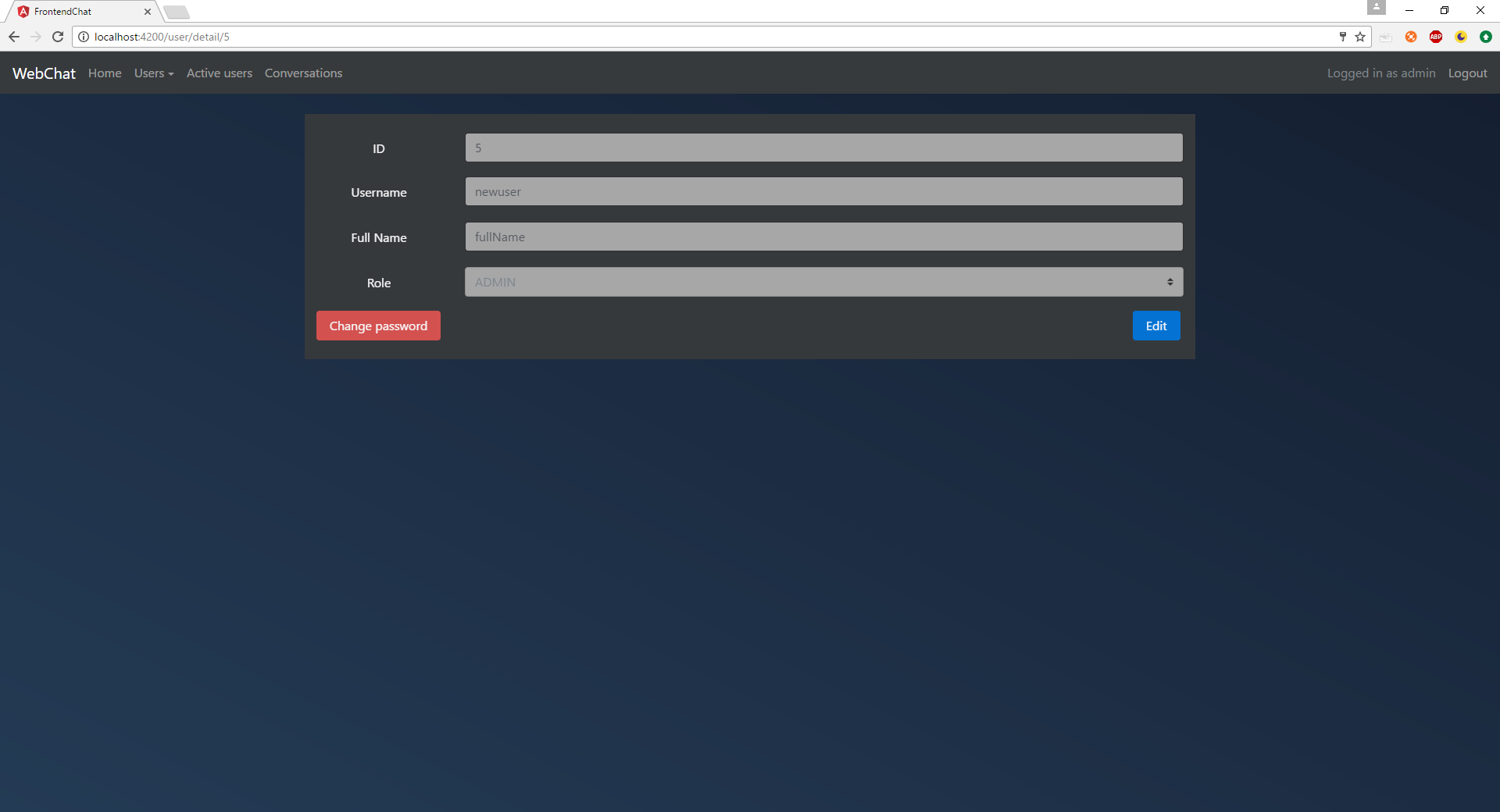
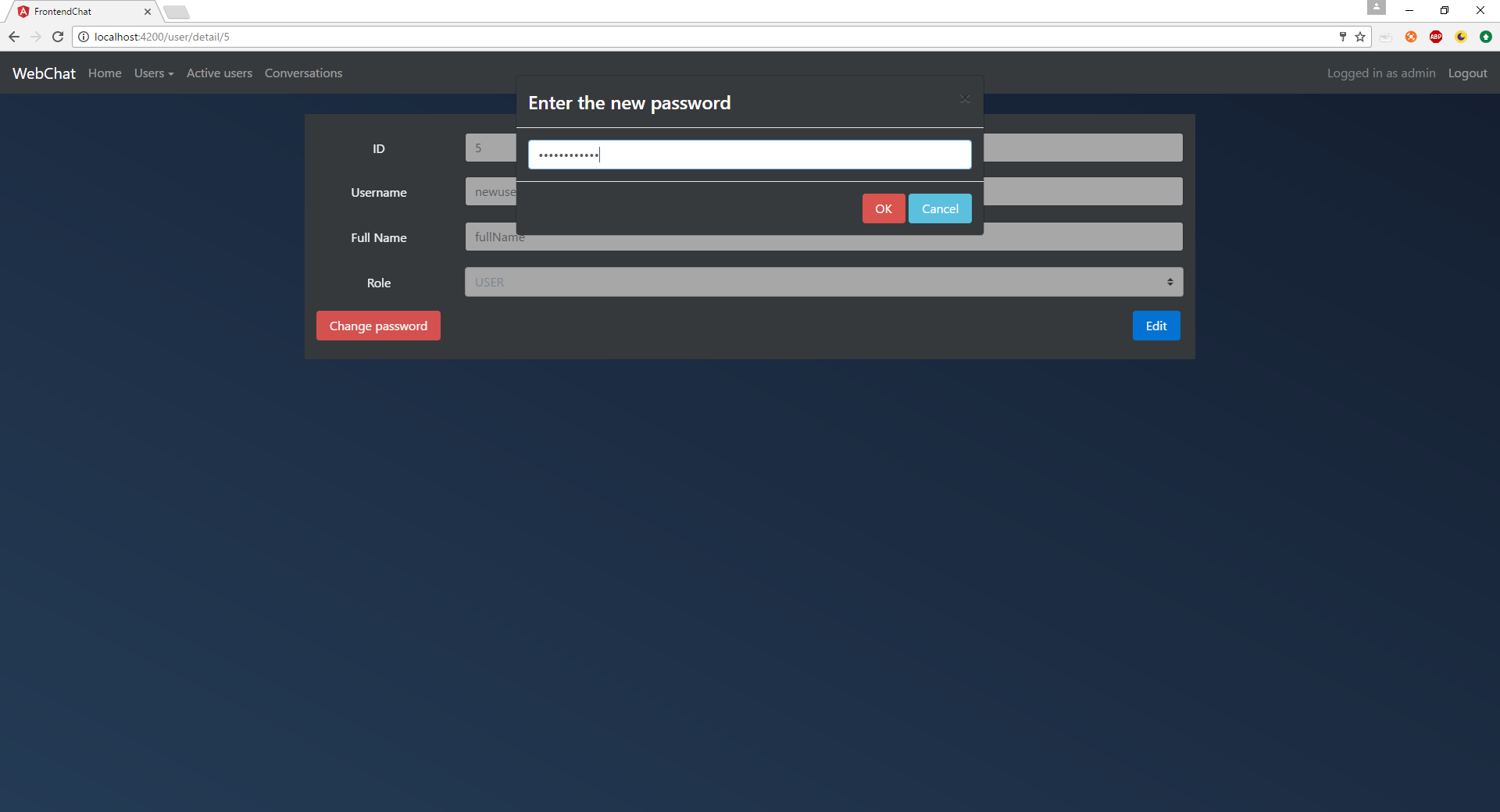
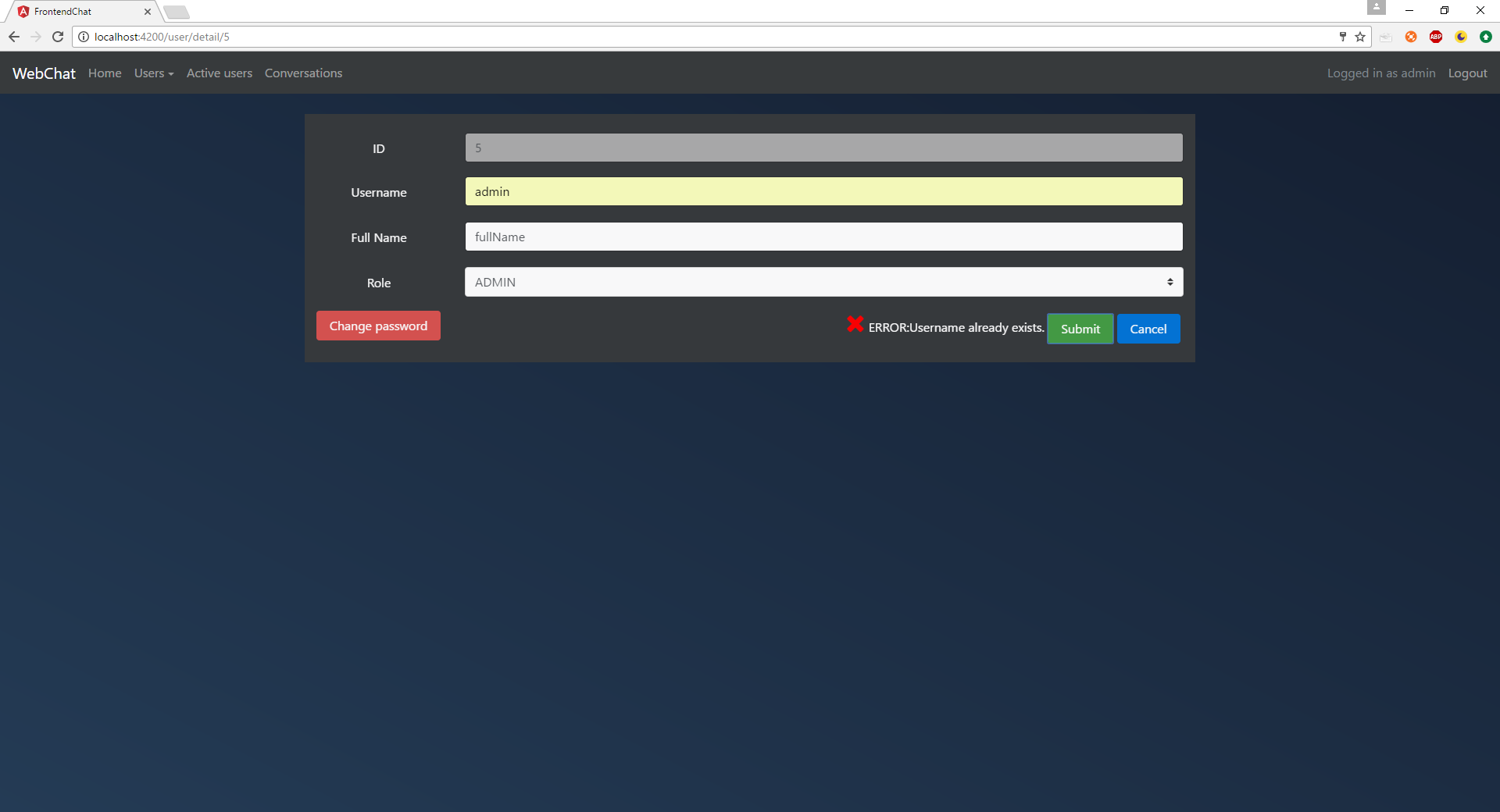
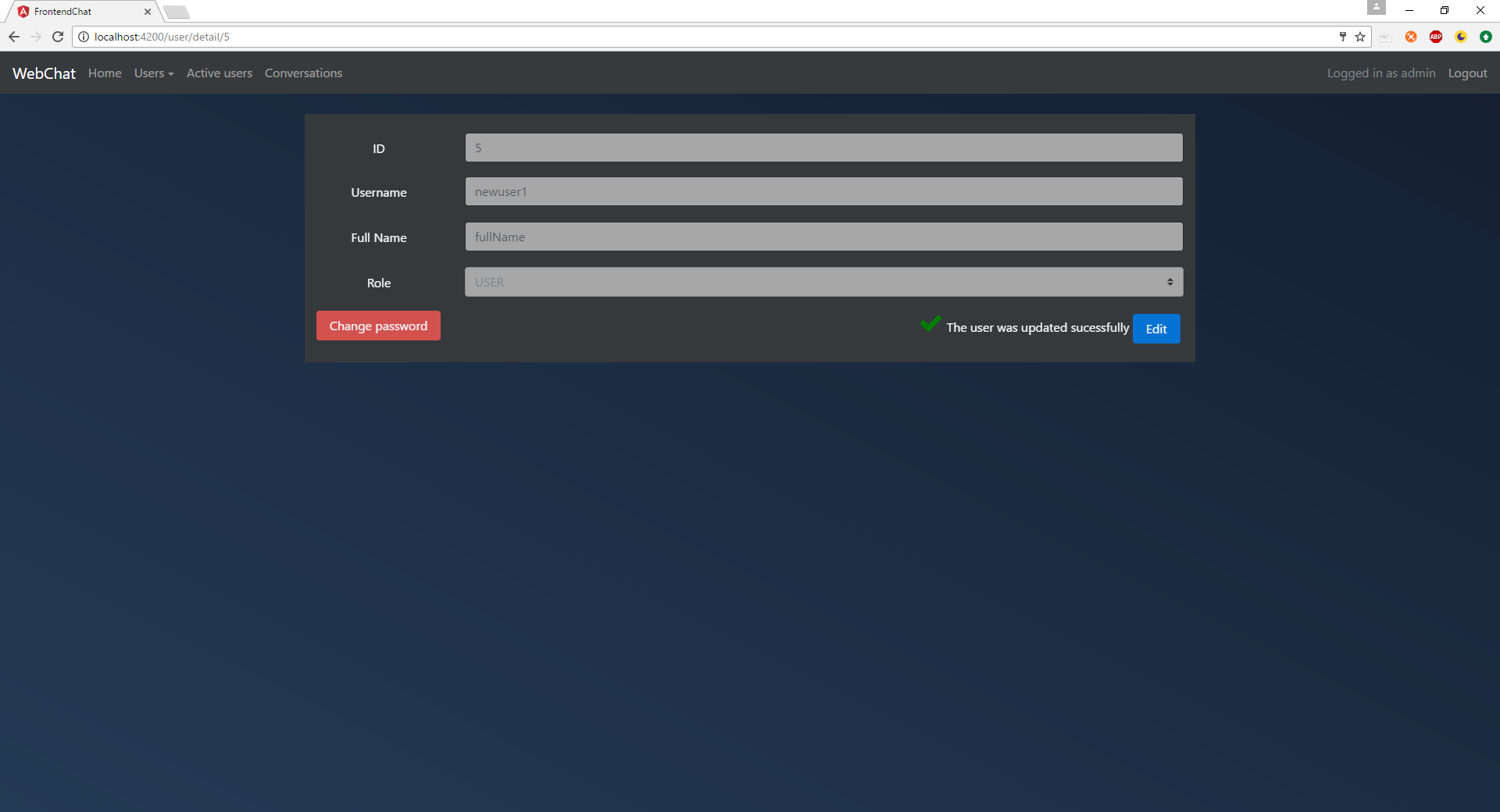
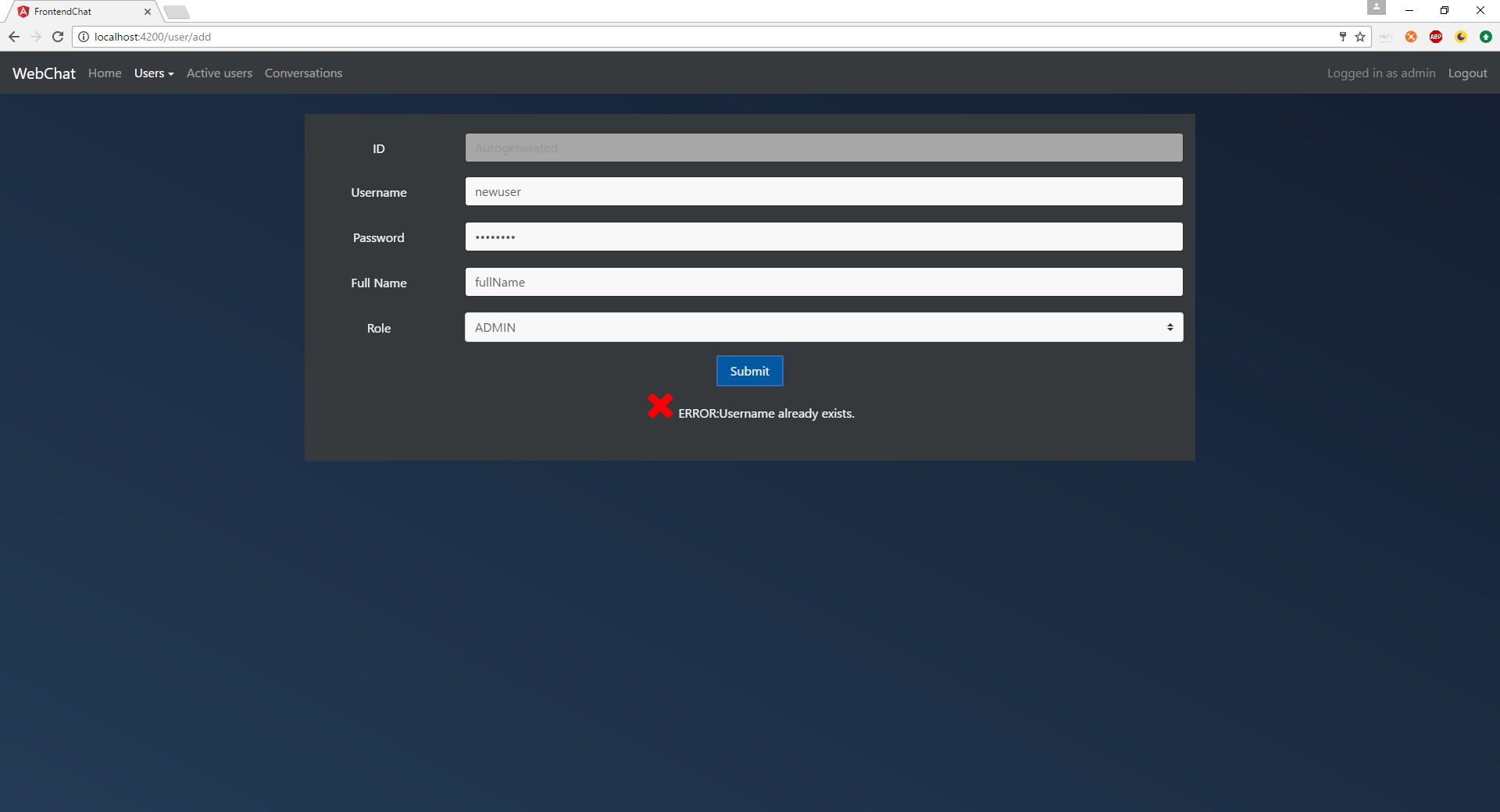
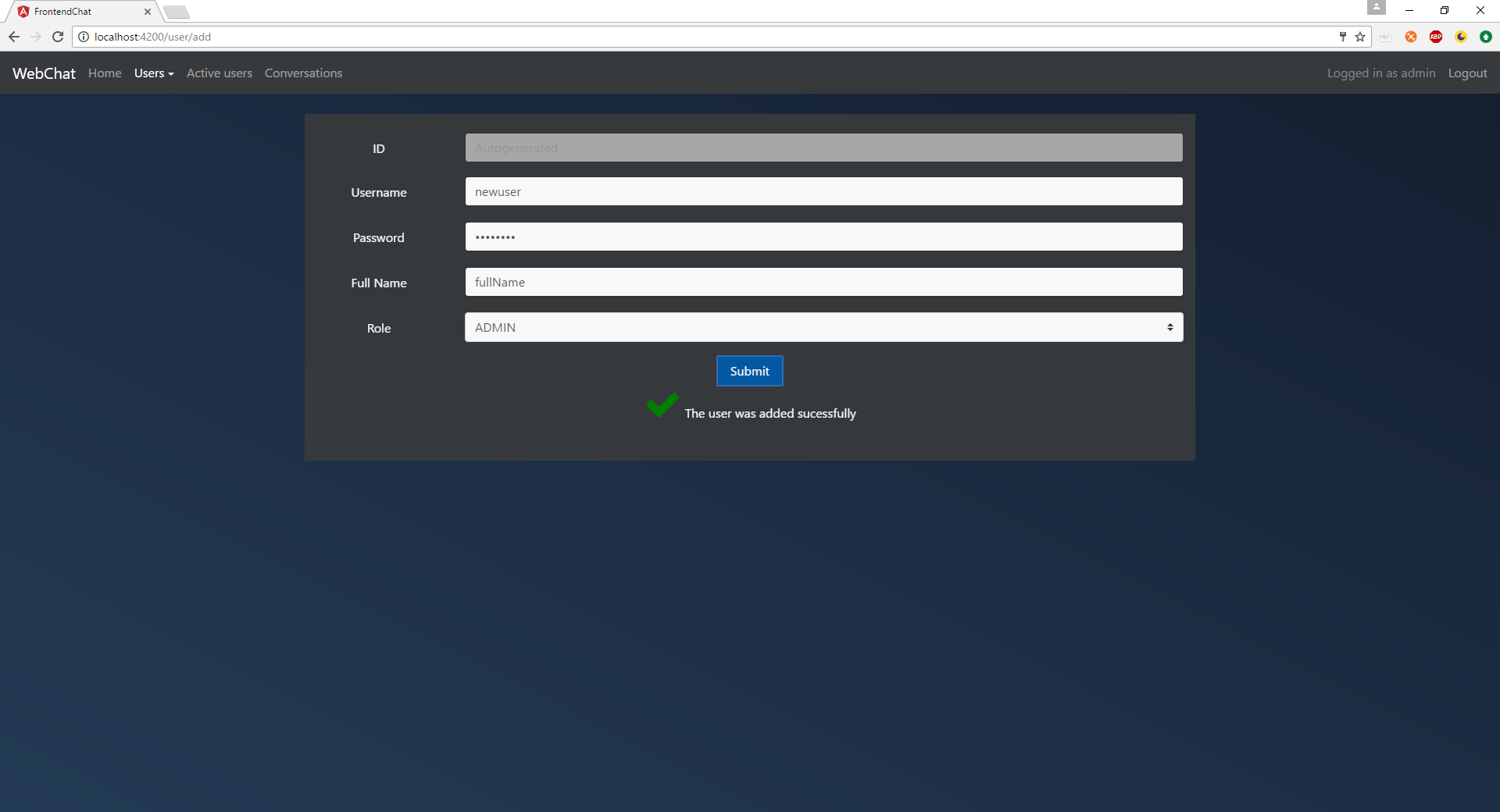
The home page of the application looks like this

The login page can be reached by clicking the “Login” button in the upper-right corner. The users are able to log into the application by entering their credentials and clicking the “Log In” button.

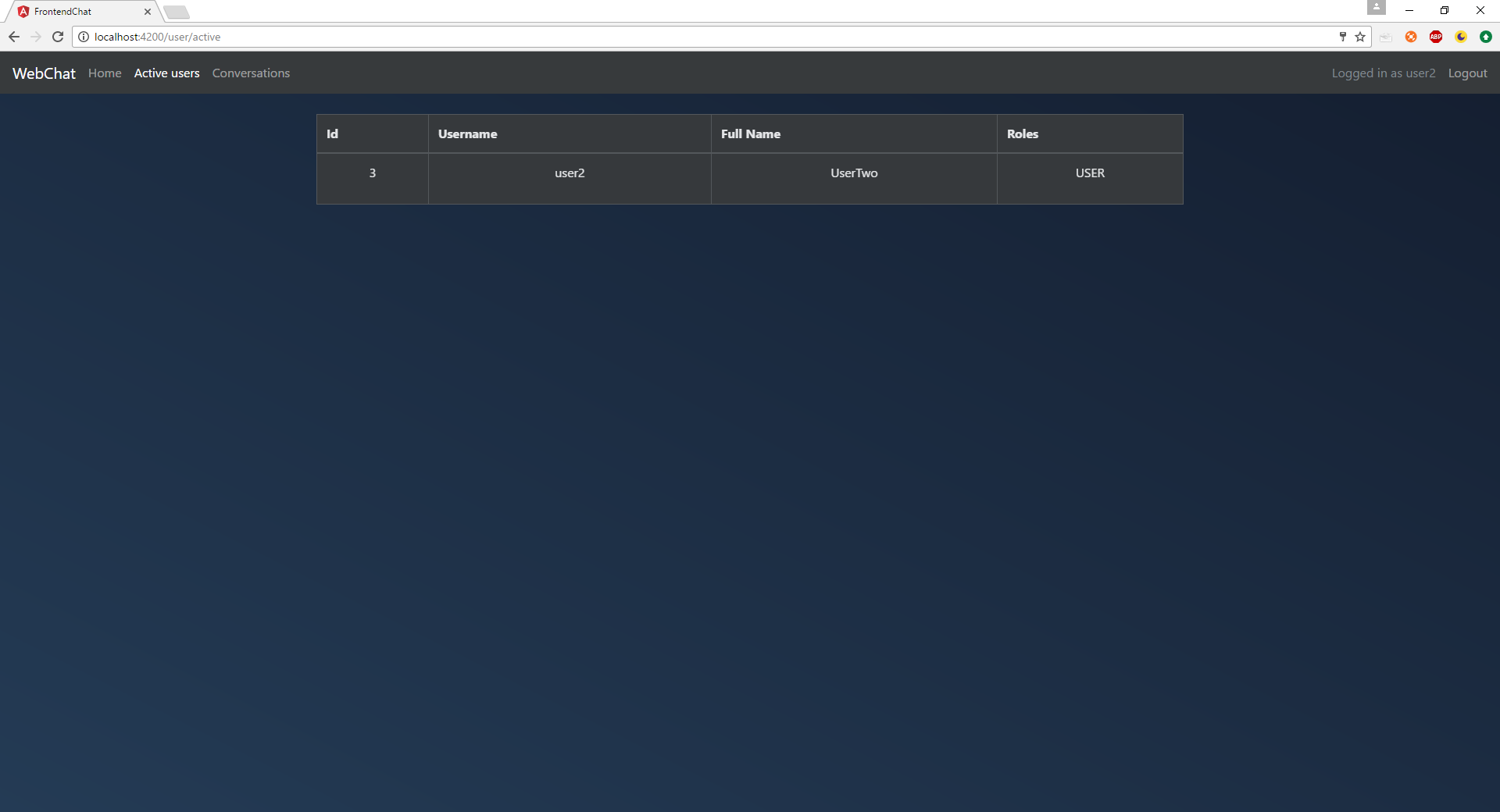
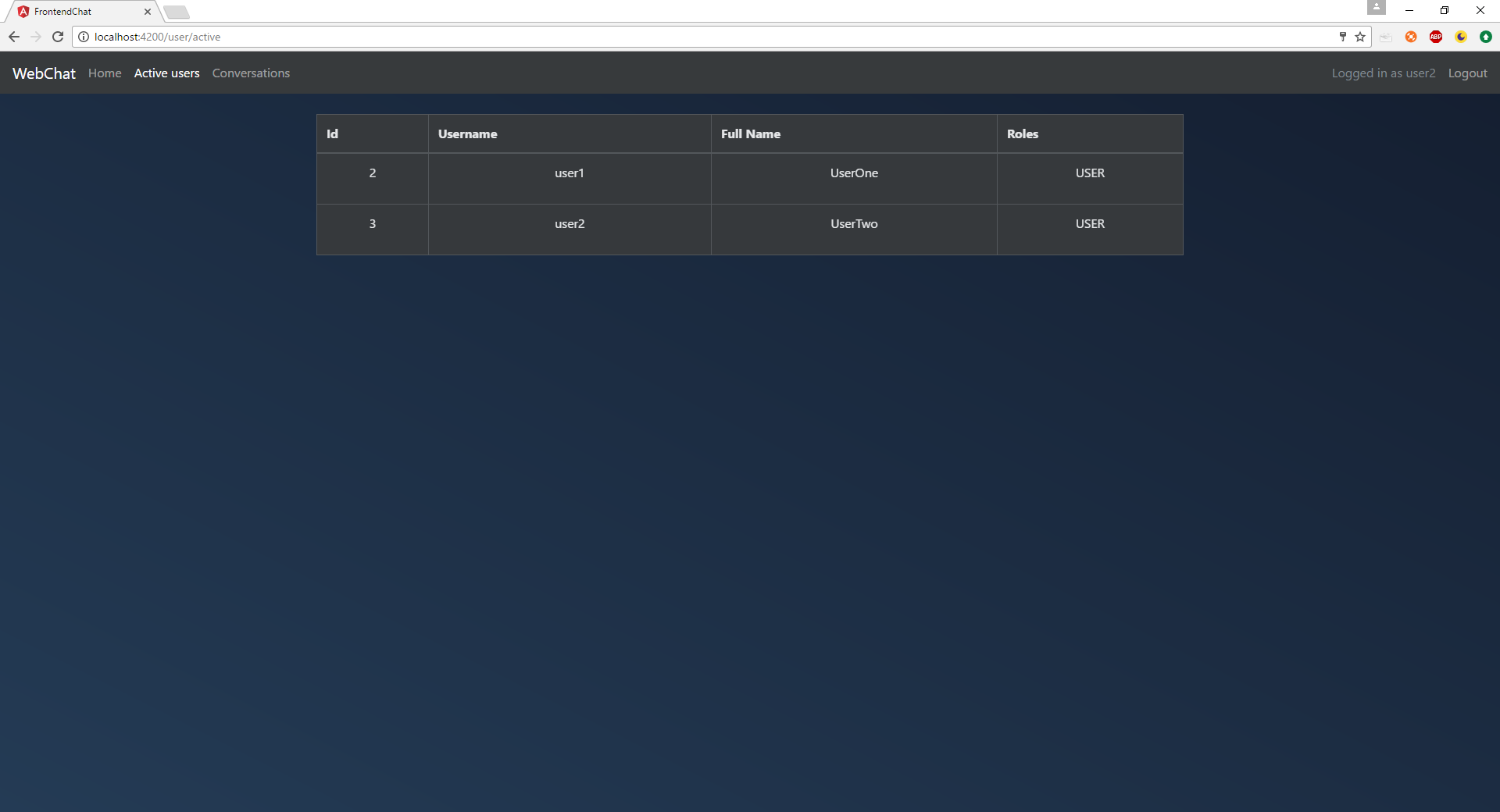
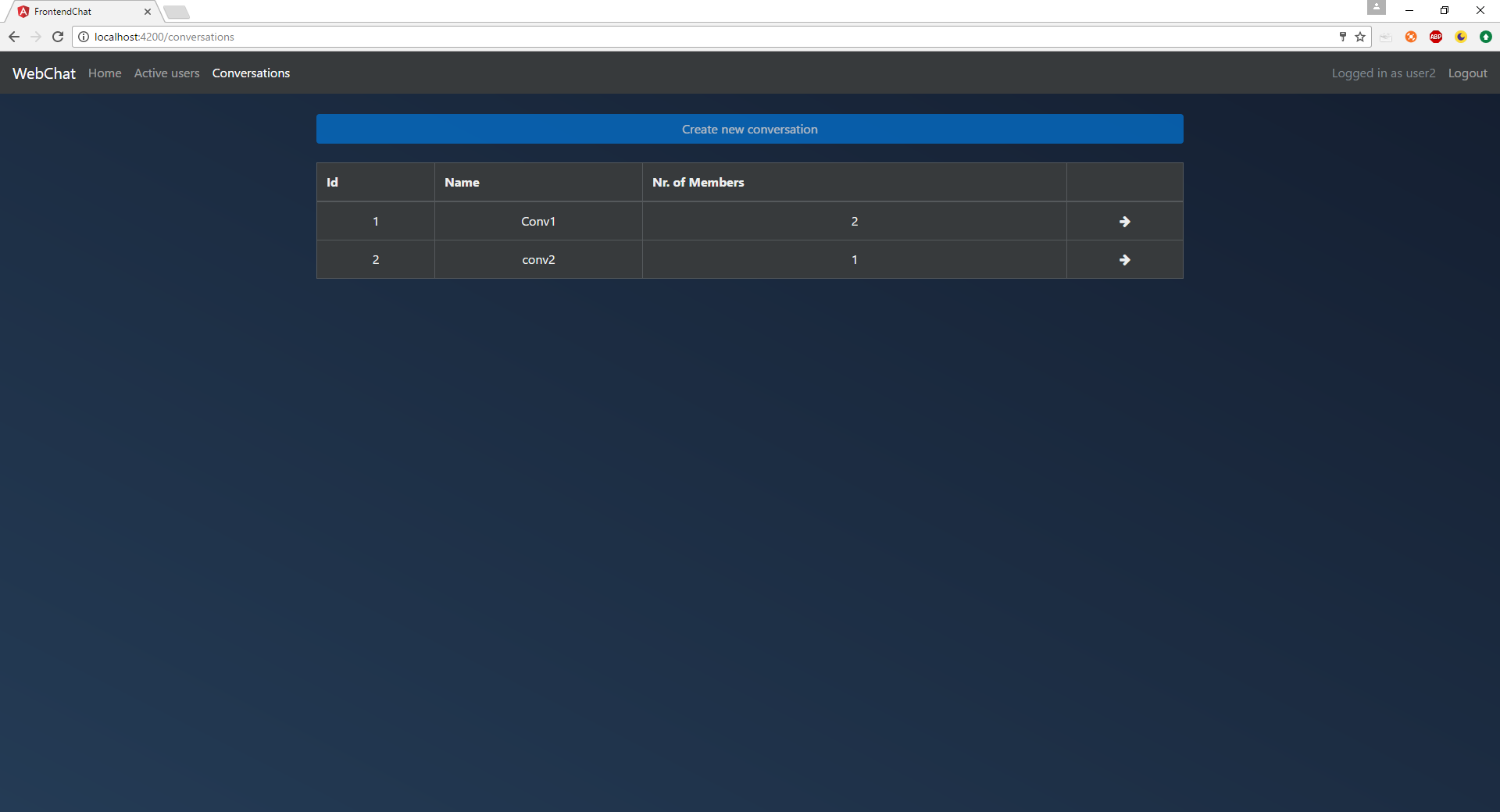
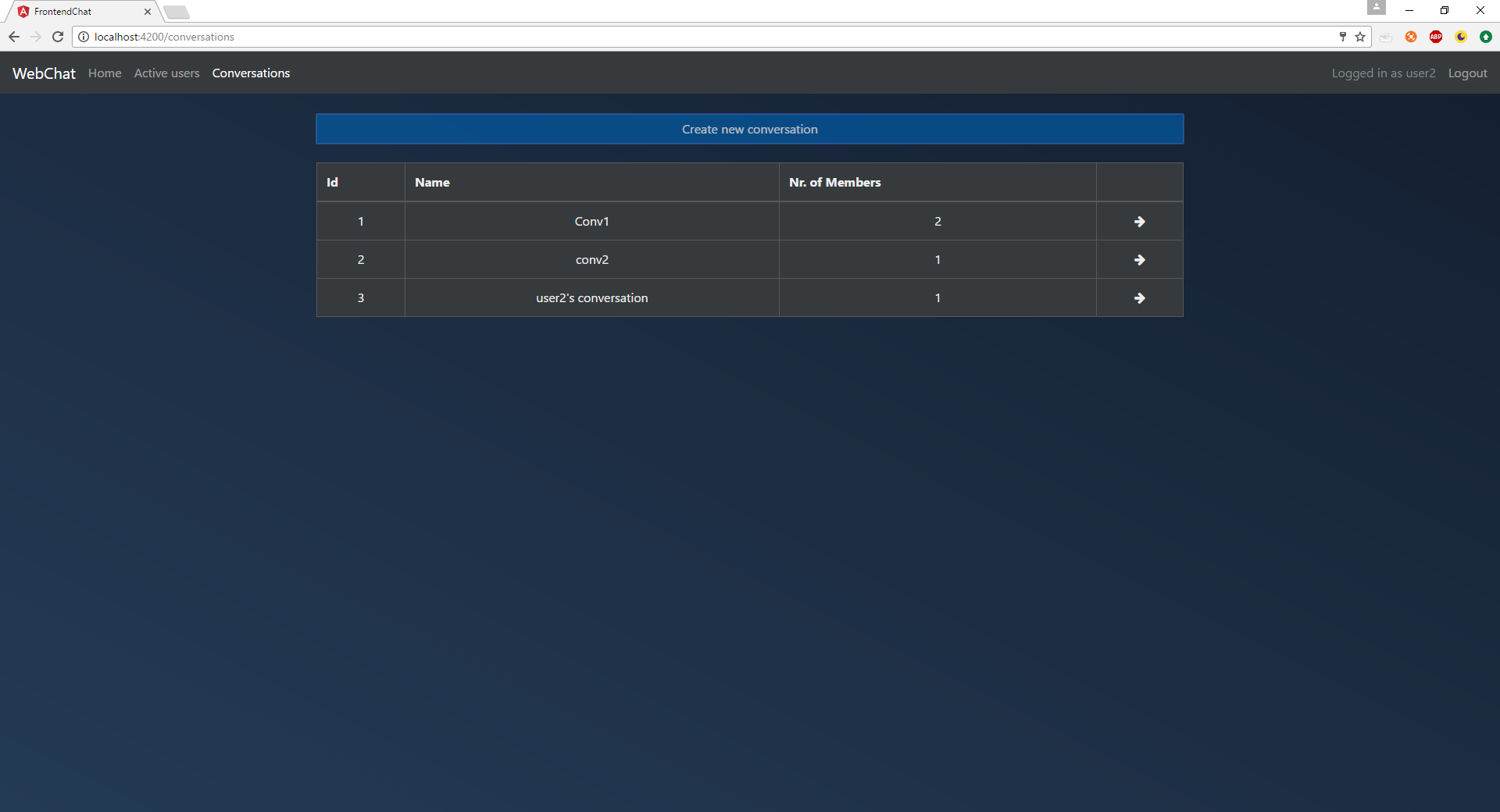
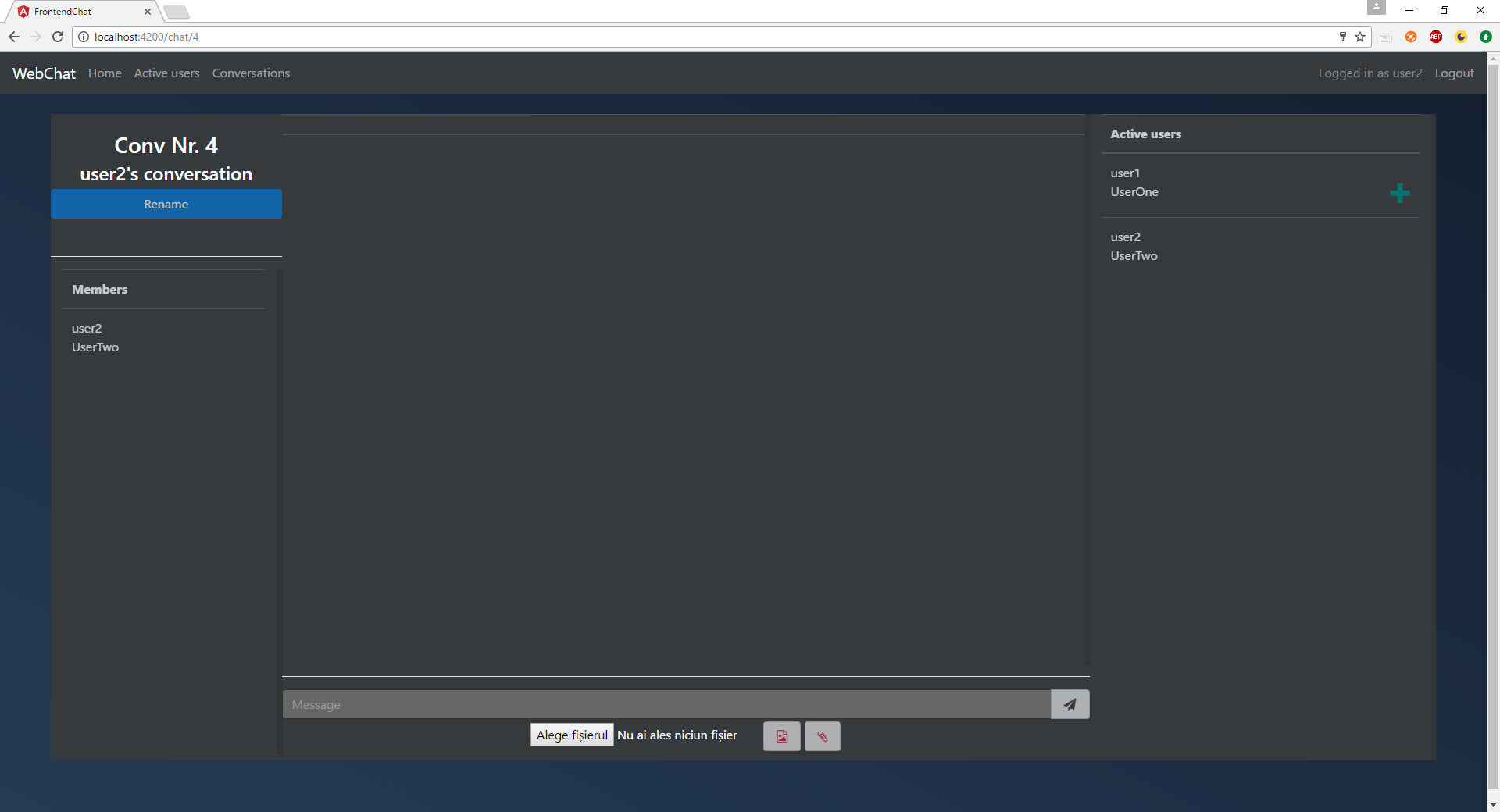
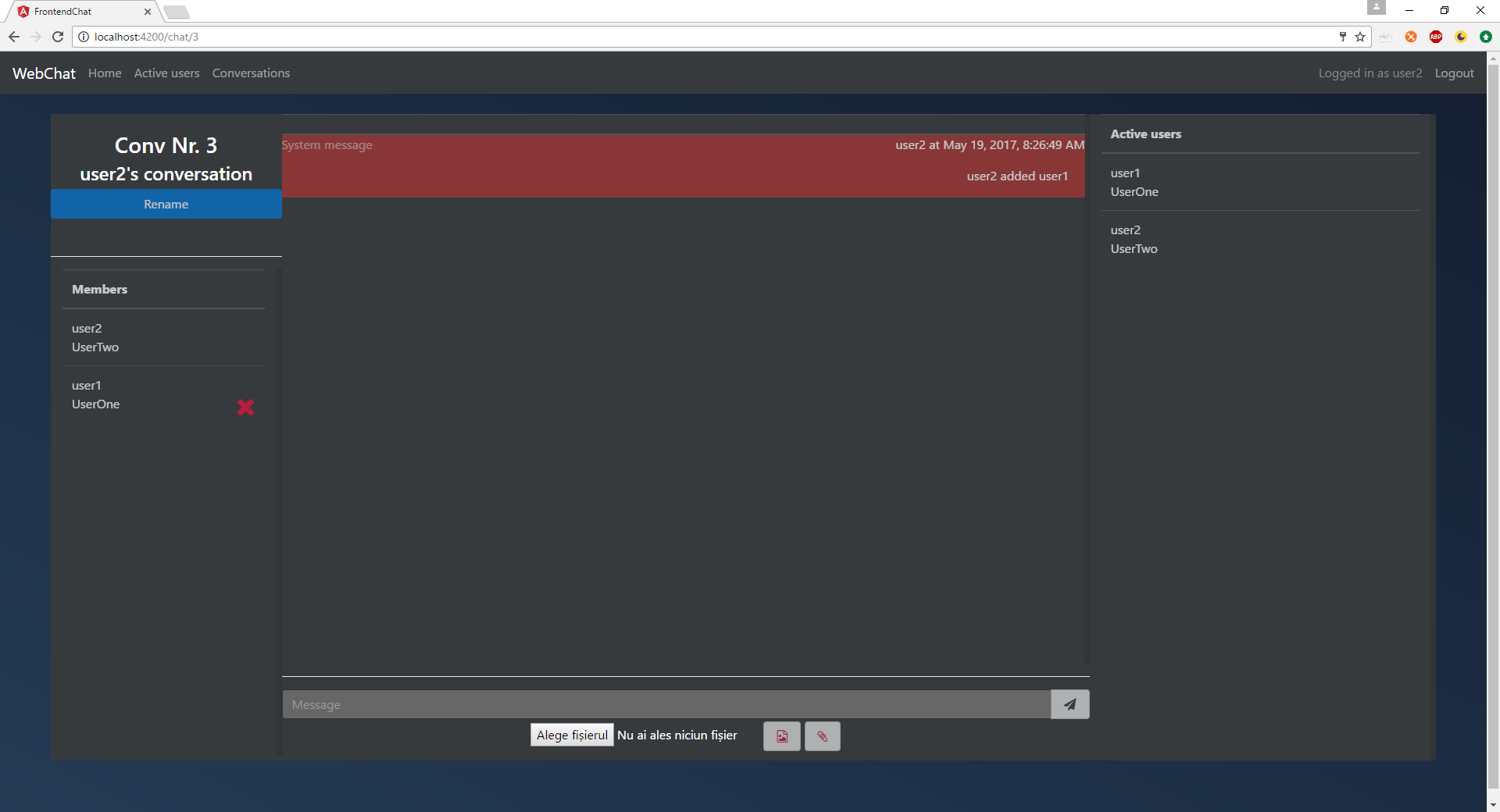
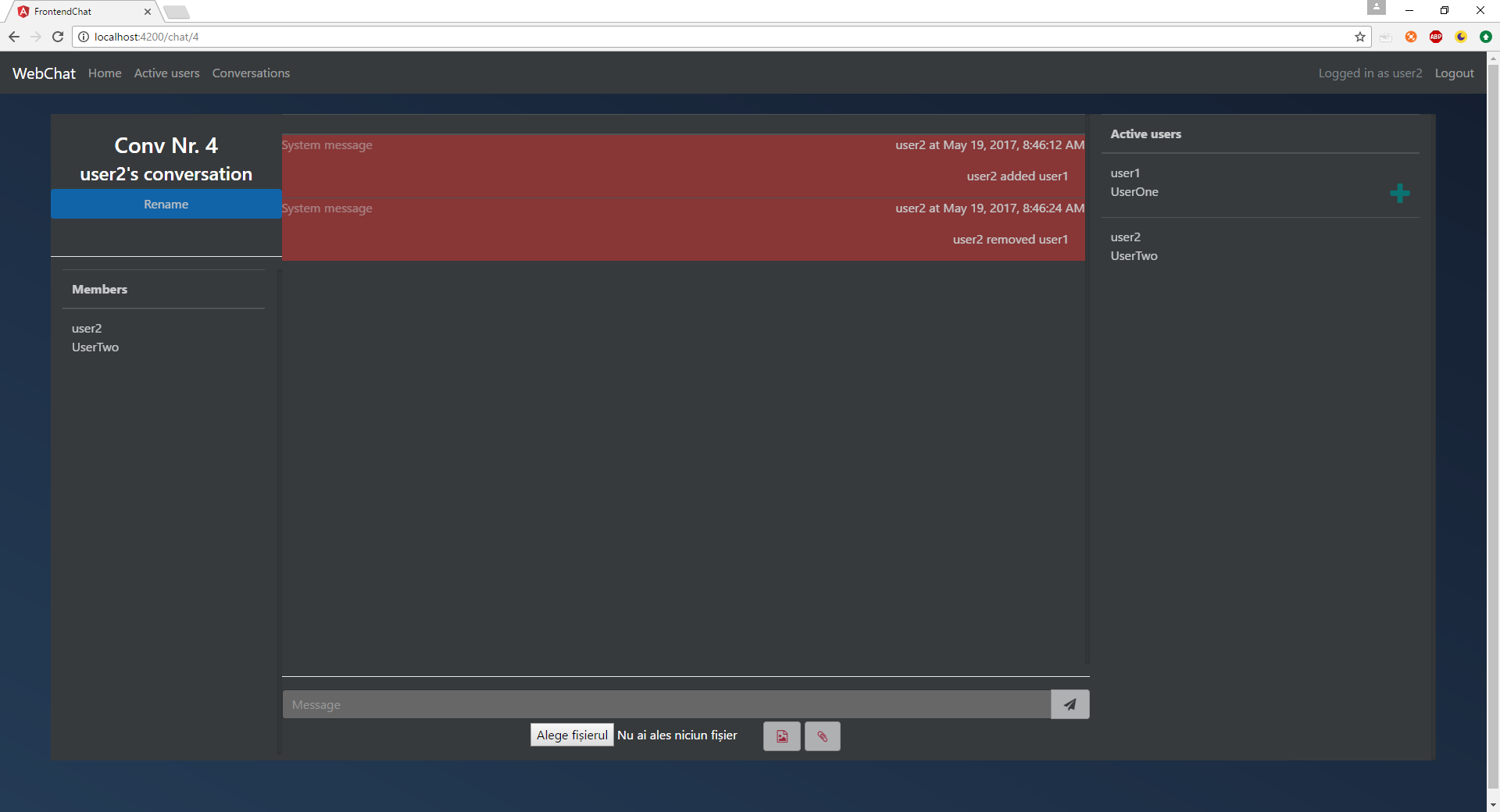
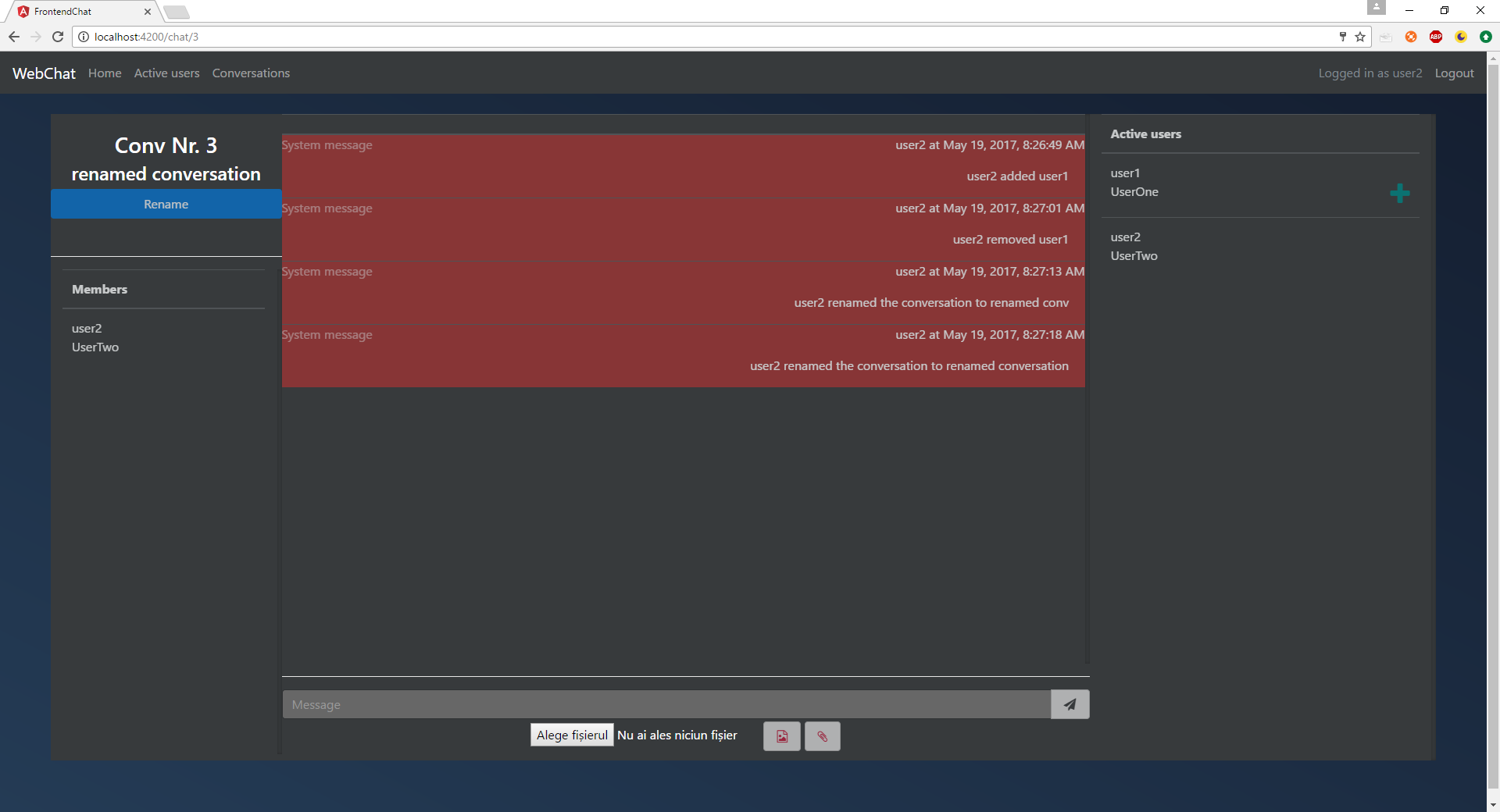
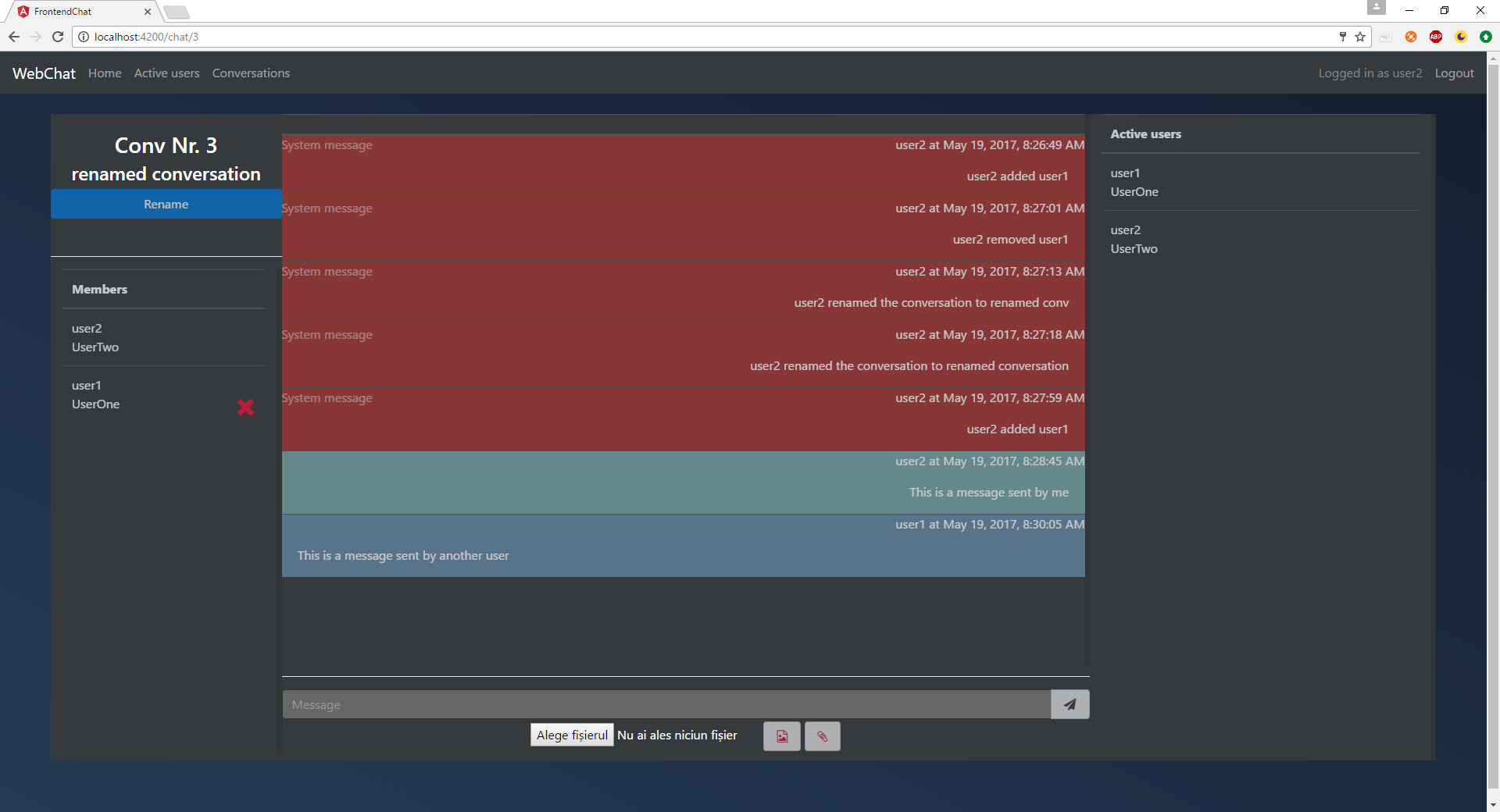
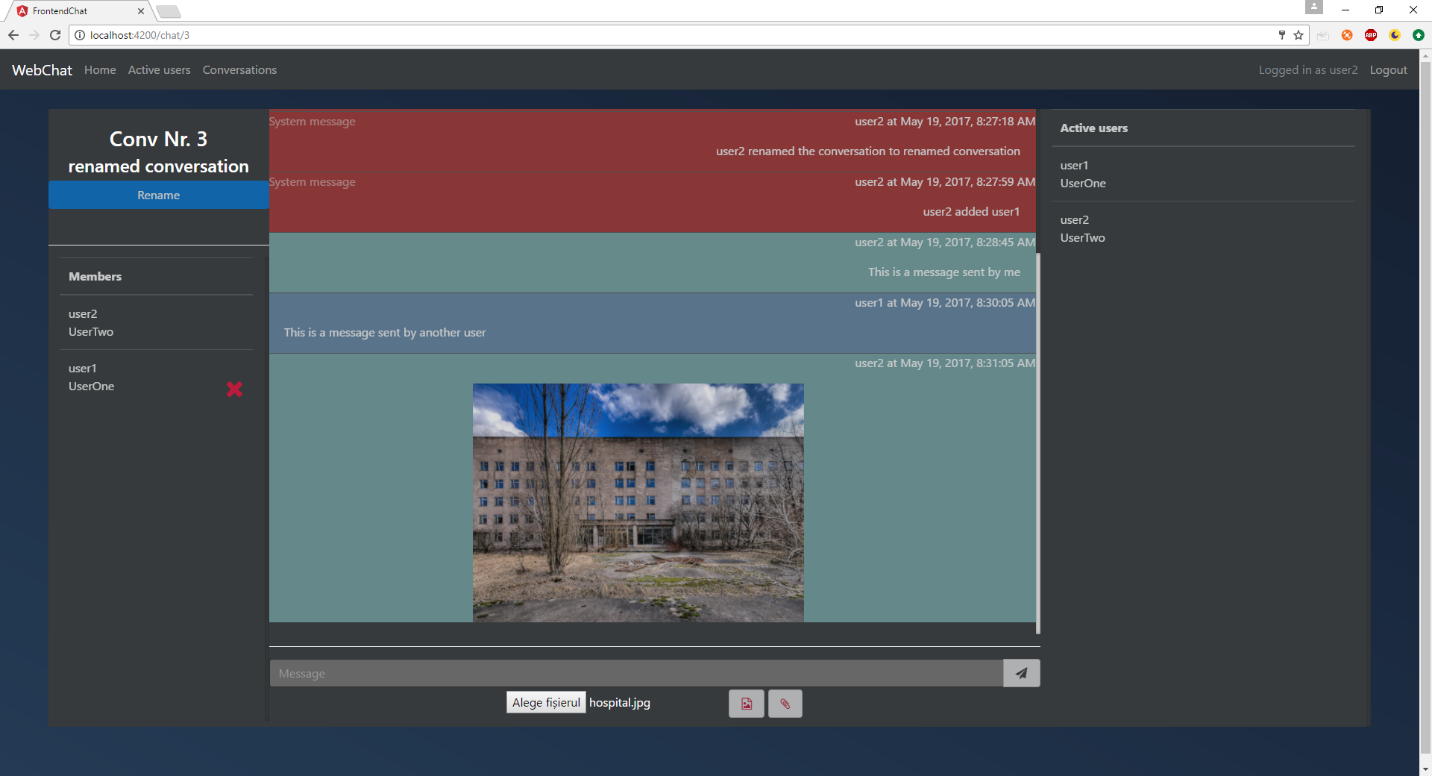
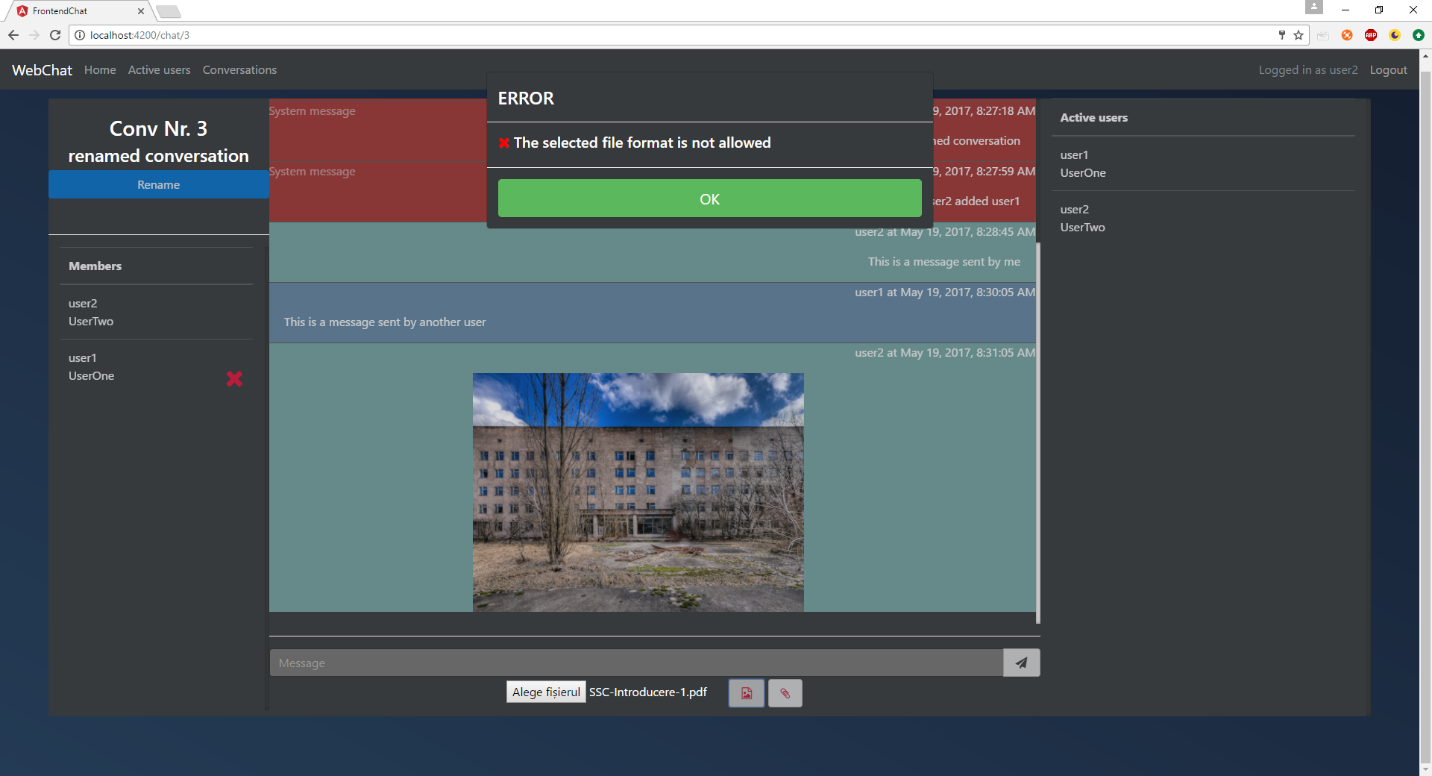
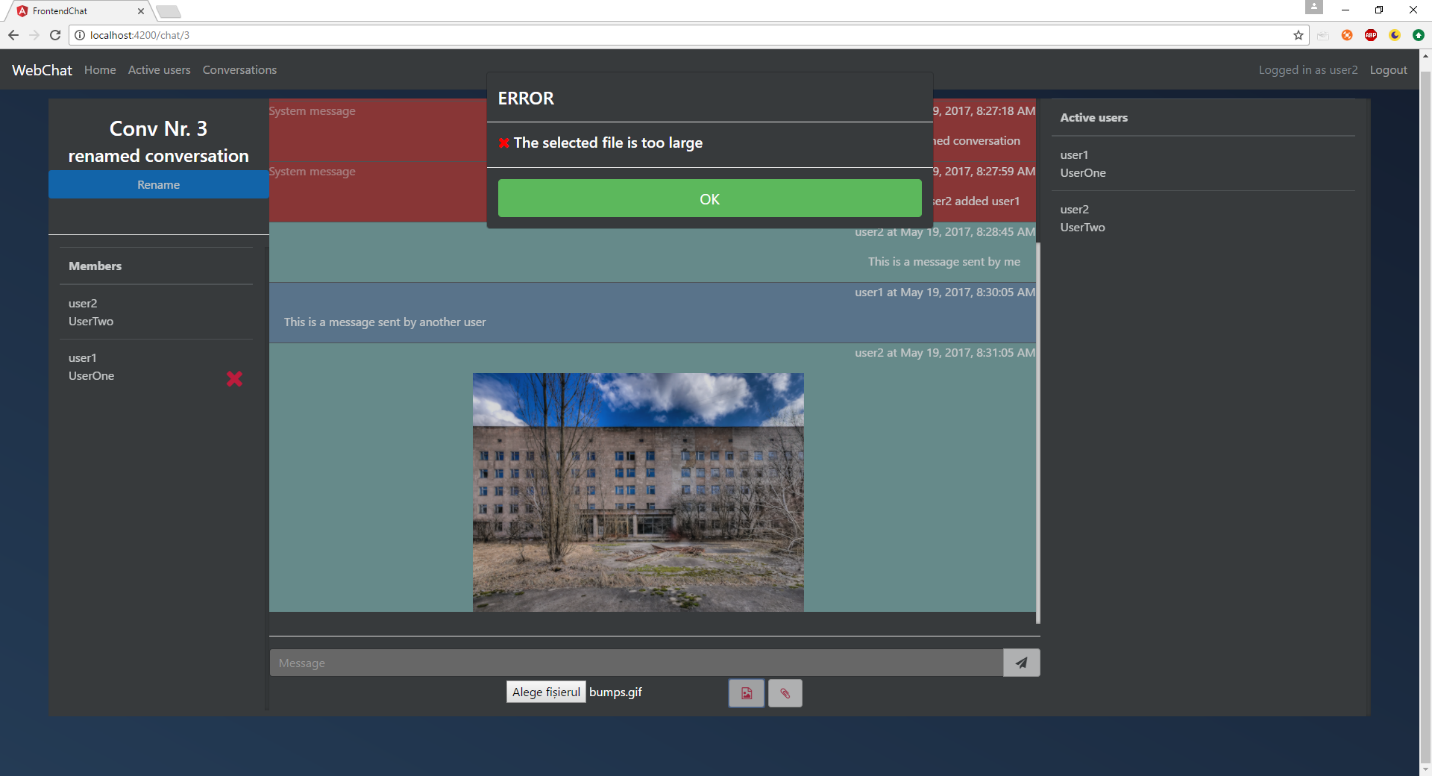
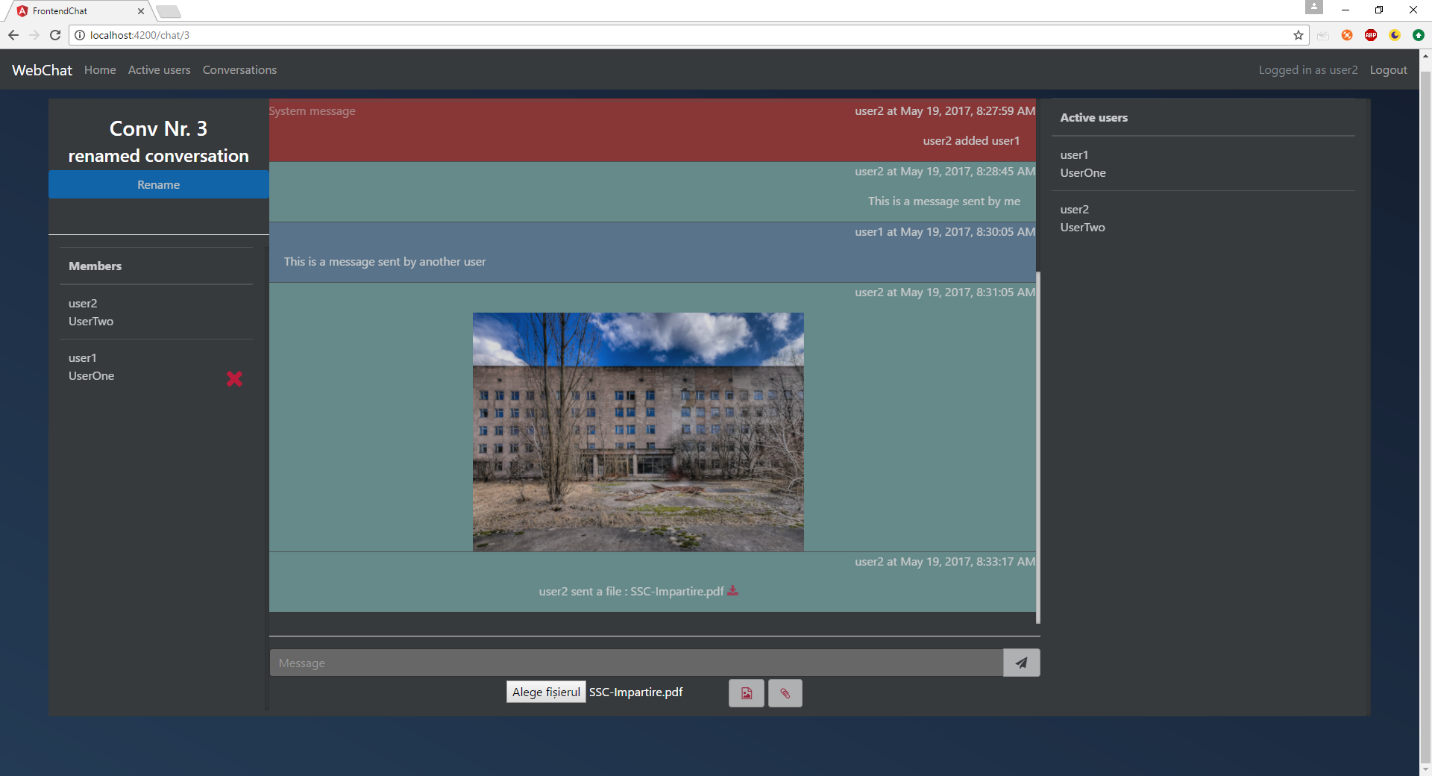
The initialization script created four users that can be used for logging in:

* user: admin (pass: admin) – administrator user
* user: user1 (pass: user1) – regular user
* user: user2 (pass: user2) – regular user
* user: user3 (pass: user3) – regular user

The administrator can perform CRUD operations on user data.

* See a list containing all users by going to Users->List users
* Delete a certain user by clicking on the “Delete” button from the corresponding column
  + Confirmation prompt
  + Warning: You won’t be able to delete or edit yourself (you will receive an error message stating exactly that)
  + Success
* Edit the user data by clicking on the “Details” button and then selecting “Edit” to make the fields editable. When the user is done editing they should click the “Submit” button
  + Prompt for changing password of a user
  + Error (duplicate username)
  + Success
* Add new user accounts by going to “Users->Add User”
  + Error (username already in use)
  + Success

Both the administrator and the regular user have access to the chat functions.

* A list of all active users can be seen by going to Active Users. The list updates itself without the user having to refresh the page as more users log in or out of the application
  + One user
  + Two users (the second one is logged in from another browser/ computer)
* By going to conversations you can see a list of the conversations you’re a member of
* By clicking the “Create new conversation” button a new conversation that only contains you and that has the name “ <Your\_username>’s conversation” will be created
* By clicking on the arrow on the right side you will be taken to the chat page for that conversation
* On the right side you can see all the users that are active right now. By clicking on the teal plus sign you can add them to the conversation. When they’re added you will see a system message stating that you added someone (system messages have red backgrounds)
* On the left side you can see the members of the conversation. By clicking on the red X sign you can remove them from the conversation. When they’re removed you will see a system message stating that
* By clicking the rename button you can rename the conversation. The rename will trigger another system message
* By entering some text in the input field at the bottom of the screen and pressing Enter or clicking the “paper plane” button you will send the message. Notice how the messages sent by you look different from the ones sent by the other users
* By uploading a file using the file chooser you have two options
  + Send it as an image if the format is an image format by using the “photo” icon (the one on the left)
  + Invalid format
  + Too large (over 2mb)
  + Send it as a file by using the “paper clip” icon
  + Again, the file should be under 2MB as stated in the specification
  + The file can be downloaded by anyone by clicking the red “download” icon near the name of the file.