# **User Management System**

The web application is developed to manage users. Here, users can sign up in the public signup page and then they can login using their email and password they have provided during signup.

# Technologies used

- 1. Angular 8 for frontend
- 2. Material Angular for UI
- 3. Node.js backend
- 4. Express JS framework
- 5. JWT token for authentication
- 6. MongoDB as Database

#### Role based access

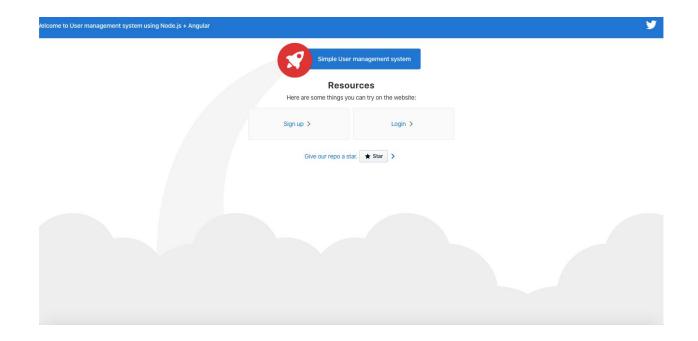
I have implemented role based access to the application. There are two type of role and a public access. All of them are mentioned below:

- 1. Public access
  - a. Can sign up for the application
  - b. Can visit the front page
  - c. Can Login
- 2. User access
  - a. Can view his/ her own details
  - b. Can update his/her own details
- 3. Admin access
  - a. Can view his/ her own details
  - b. Can update his/her own details
  - c. Can view list of registered users
  - d. Can update the details of the registered users.
  - e. Can delete users

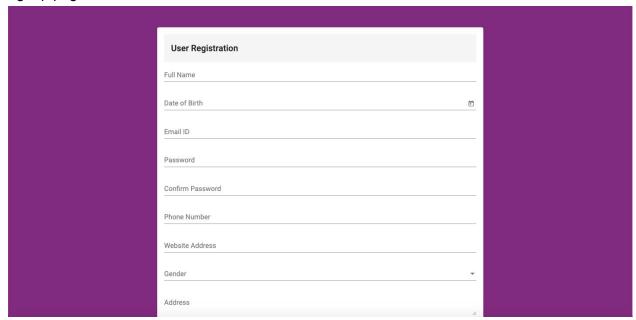
## Workflow screenshots

# Public pages

The front page look something like this. It is similar to the template provided by the initial angular template.

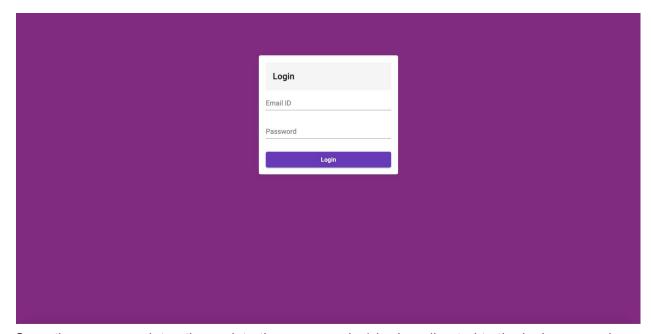


Here we have two options. One is Sign up and another one is Login. Let's have a look at the signup page first.



Here the user sign up for the portal with the basic details, for example Name, Date of birth, Email ID, Password, Phone number, Website Address, Gender and Address. One email id can only be used once across the application, so we have validated if the email id is already registered with the system, while registering the new user.



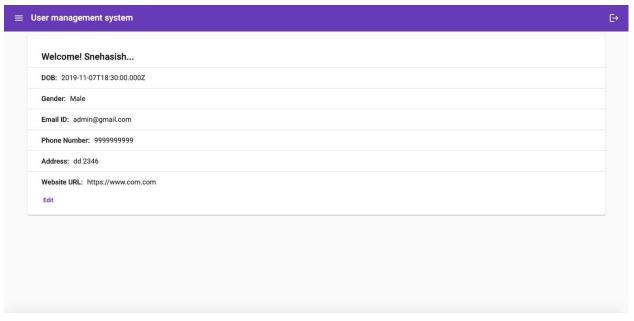


Once the user completes the registration process, he/she is redirected to the login page, where he/she can login using the provided email id and password. Passwords in the application does not travel in the plain text format. They have been hashed using SHA256 hashing algorithm and stored in the database in the same way.

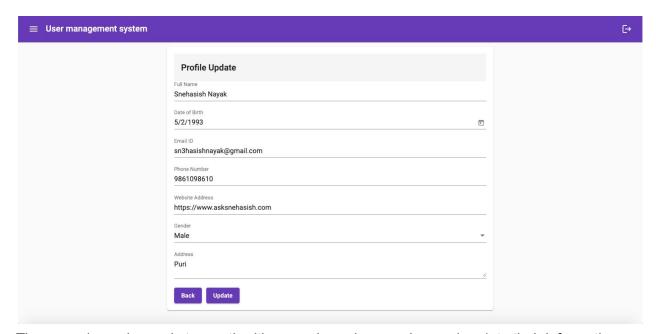
#### Note:

If the user is already logged in, he/she will be redirected directly to the profile page.

### For users with the role "User"

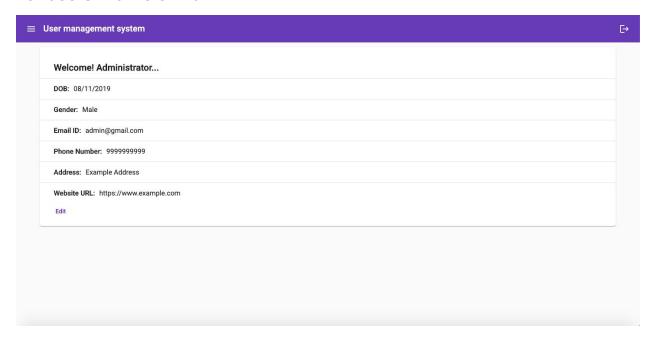


Once the user logs in, he is taken to his/her profile page, where the normal user can view the basic details provided while registering for the first time. And below the details, there is an edit button which can be used to edit the information (except the email id) as shown below.

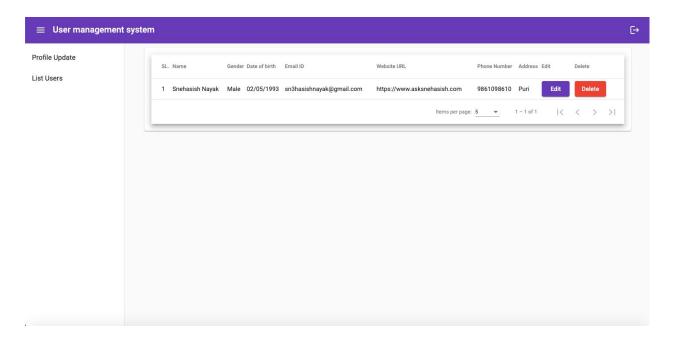


The normal user has only two authorities over here, he can view and update their information.

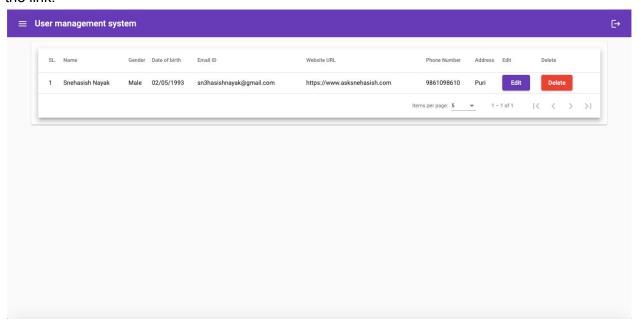
### For users with role "Admin"



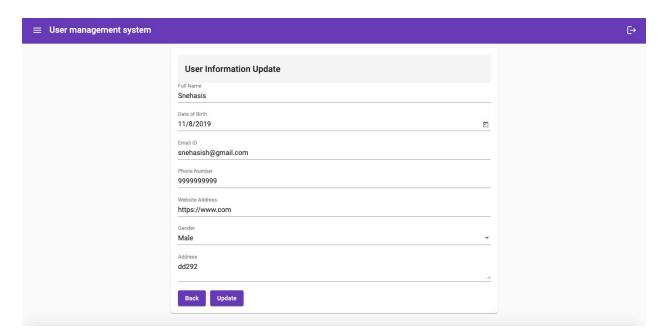
Like we had a profile option for the normal user, Once the admin logs in to the application, he is taken to a similar profile page, where he can view and update his own information. Technically, the same page has been reused for both user and the admin. And the profile edit page works in the same way as well.



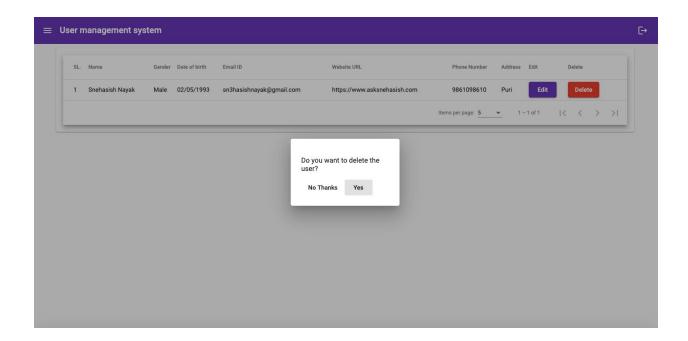
To switch to another page, "List Users" the admin has to use the side navigation and click on the link.



As suggested, the user list is populated in a tabular format with edit and delete buttons next to some basic information. The table is having pagination which can be used for paging purpose.



The edit page is similar to the page we had for profile edit. I have reused the same page for all of them.



Last but not the least, We have a delete button in the page next to each line. Once we click on it, a dialogue appears and by confirming the same, the entry is removed from the application.

```
id: ObjectId("5dced541945b7ffc5d34060d")
email: "admin@exmaple.com"
name: "Administrator"
webUrl: "https://www.example.com"
phone: "9999999999"
address: "Example Address"
dob: "2019-11-07T18:30:00.000Z"
gender: "Male"
password: "849f1575ccfbf3a4d6cf00e6c5641b7fd4da2ed3e212c2d79ba9161a5a432ff0"
role: "admin"
```

The data is stored in the above format.

Thank you.