# **Role-Based User Management System**

## Using ReactJS, Node.js, MongoDB, and SCSS

#### Introduction

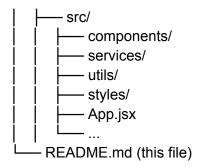
This project is a full-stack Role-Based User Management System built with:

- Frontend: ReactJS (with functional components & hooks), styled using SCSS
- Backend: Node.js (Express.js)
- Database: MongoDB
- Authentication: JWT-based login, bcrypt password hashing
- Features:
  - Role-based access (Admin & User)
  - Admin can manage all users (create users, view all)
  - Users can access their own restricted dashboard
  - Responsive, modern UI using SCSS
  - Proper input validation & notification for UX

#### **Features**

- Two user roles: Admin and User
- Admin can create new users and view all users
- Users can only access their own dashboard
- First Admin must be inserted directly in the database for security (no signup)
- Login: JWT-based secure authentication
- Logout: Clears session/localStorage
- Notifications: Success/error feedback via toasts
- SCSS Styling: Clean, consistent, and responsive

## **Project Structure**



### **Prerequisites**

- Node.js (v14 or higher)
- npm (v6 or higher)
- MongoDB (local server or MongoDB Compass)
- Code Editor (Recommended: VS Code)

## **Setup: Step-by-Step Guide**

- 1. Clone the Repository or Create Folders.
- 2. Backend Setup: Create config, models, routes, and middleware folders.
- 3. MongoDB: Insert First Admin Using MongoDB Compass or mongosh.
- 4. Start the Backend:

cd backend

npm run dev

Check terminal for: Server running on port 5000 and MongoDB Connected:

localhost.

5. Frontend Setup: Create the directory structure and add the frontend source files as provided (components, styles, services, etc).

Add to frontend/package.json: "proxy": "http://localhost:5000"

6. Start the Frontend:

npm start

Access the app at <a href="http://localhost:3000">http://localhost:3000</a>

## How to Use the Application

#### 1. Login:

• Go to http://localhost:3000

• Login as admin:

• Email: admin@example.com

• Password: password

#### 2. Admin Dashboard:

- Create users (choose admin/user role)
- See list of all users

### 3. Regular User:

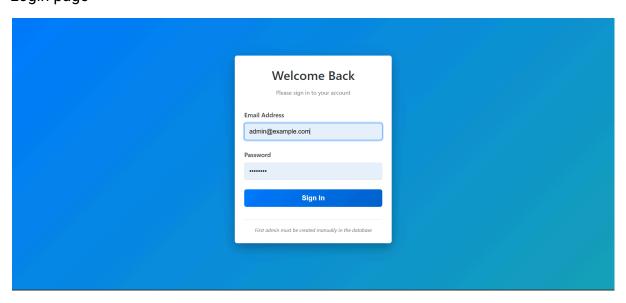
- If you create a user with role user, log in with those credentials
- Regular users see only their basic dashboard

#### 4. Security:

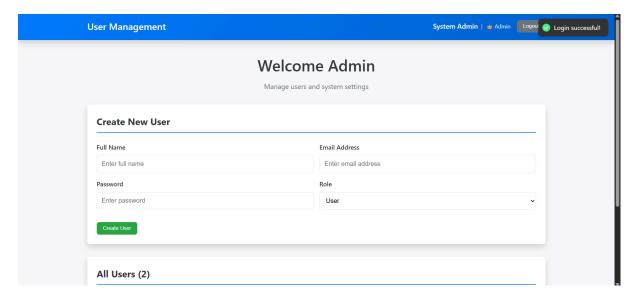
- Logout to end a session
- · Admin-only pages are protected

### **Result Screenshots**

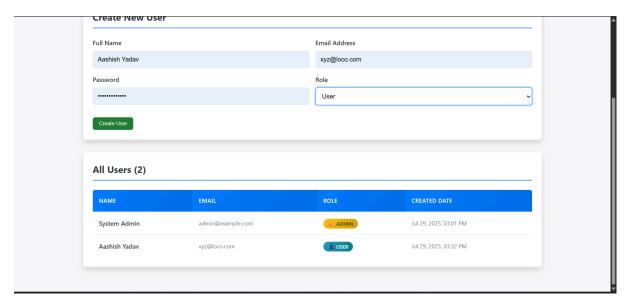
Login page



Admin welcome/dashboard



User creation form & user table



• Regular user dashboard

