Requirement Analysis:

Admin section:

- 1. This is a multi user system to perform interactions between normal user and admin
- 2. A admin can do signup using manual information (name, email, password
- 3. Admin can do sign in
- 4. A admin is able to do logout from the system
- 5. Admin is able to perform all operation after sign in
- 6. Admin can update his profile information
- 7. Admin can update his profile picture
- 8. Admin change his password
- 9. Admin can see activity log
- 10. Admin can add new user
- 11. A new user can login added by admin
- 12. Admin can update an existing user information
- 13. Admin can delete temporary or soft delete user
- 14. Admin can search user with pagination and de-bouncing

User section:

- 1. User can do login
- 2. User can do logout
- 3. User can change his password
- 4. User can update his profile picture
- 5. User can update his profile information.

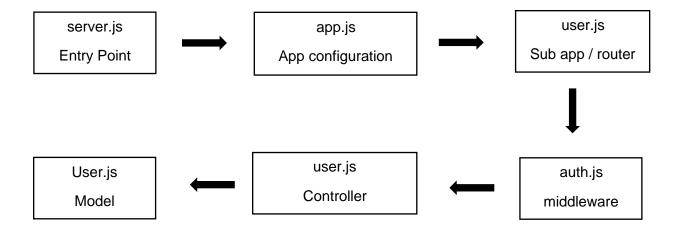
Technologies are used:

- 1. Javascript (programming language)
- 2. NodeJs, ExpressJs (backend)
- 3. JWT (authentication)
- 4. ReactJs (frontend)
- 5. Redux, Redux Toolkit (state management library)
- 6. MongoDB (NoSql Database)
- 7. Mongoose (ORM)
- 8. Styled-components (Styling)
- 9. Multer, axios, Bcryptjs, express-validators, http-errors, jsonwebtoken, momentjs, uuid, js-file-download, jwt-decode, react-router-dom(v6) [others third-party librar

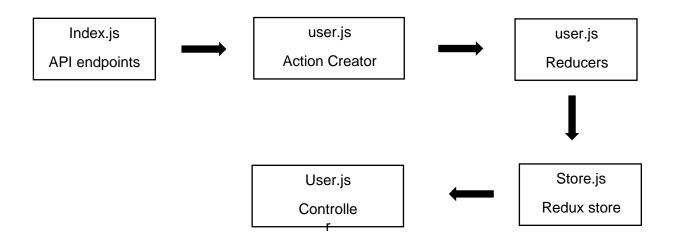
All Backend API End Points:

- 1. $Post("/admin") \rightarrow Create admin user manually$
- 2. $Get("/auth") \rightarrow Signin user$
- 3. Patch("/admin/:id") → Upload profile, update profile
- 4. Patch("/admin/change-password/:id") → Change password
- 5. $Get("/admin/activity-logs") \rightarrow Get activity logs$
- 6. Post("/users") \rightarrow Add new user
- 7. Patch("/users/:id") → Update an existing user
- 8. $Get("/users/:id") \rightarrow Get single user$
- 9. Get("/users/all") →Get all user
- 10. Get("/users") → Search user
- 11. Patch("/users/delete/:id") → Delete temporary user

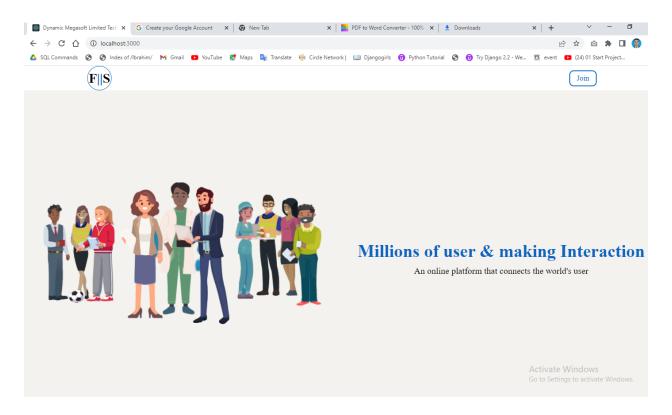
Backend Coding Structure:



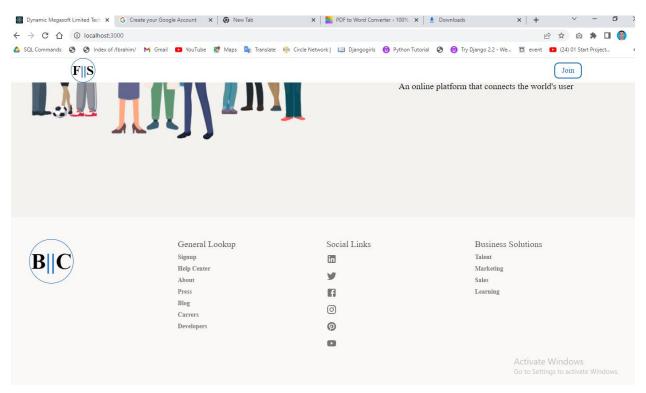
Frontend Coding Structure:



Note: All codes are implemented by following Javascript modularity, clean coding, well documented comme

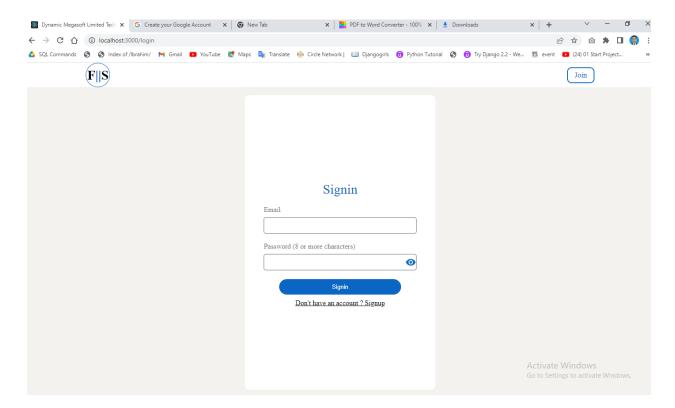


Home page

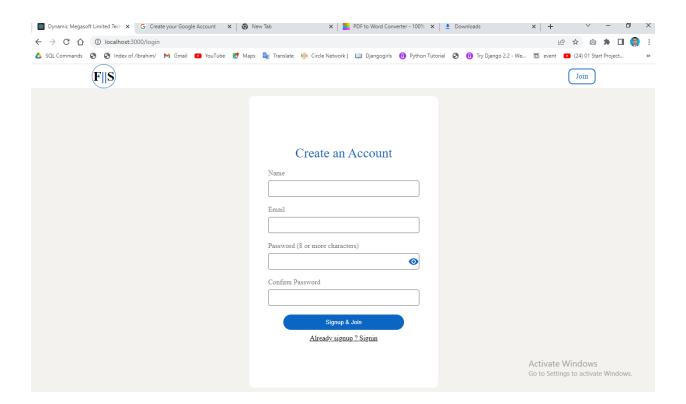


Footer

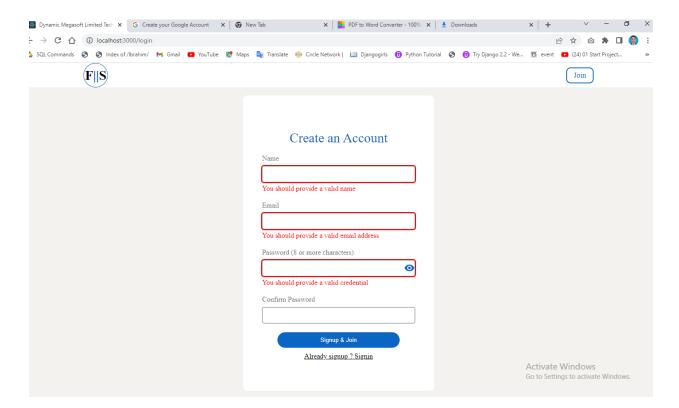
You can navigate home page to join page by clicking respectively logo(left) & join(right) button



Sign in page



Signup page



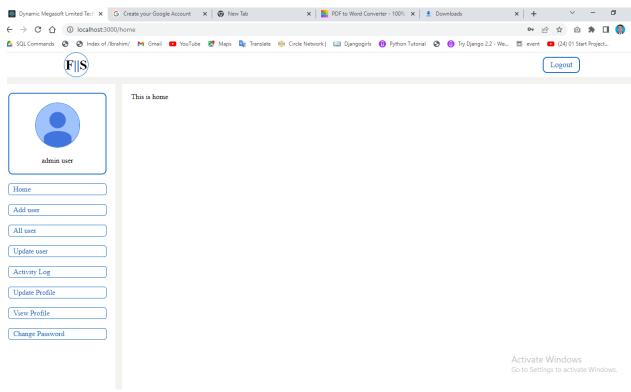
Validation before a signup admin user

A admin user has to pass within some validation before signup. There are some frontend validation like invalid name, password doesn't match and there are some backend validation like user already exist, or numeric value and at least one special char, strong password.

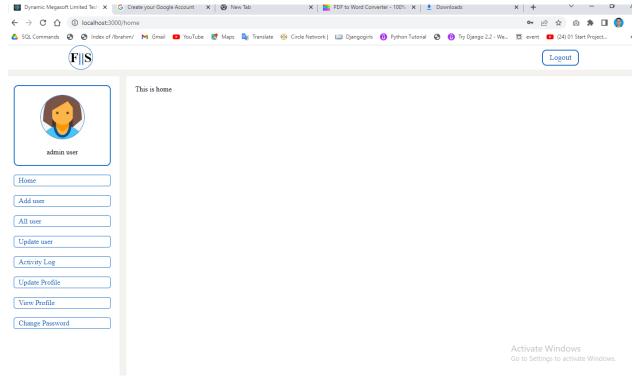
This is end of authentication system. I have used JWT for authentication and Bearer Access_Token for authorization. I stored password as encrypted format, I have used bcryptjs for hashed password. I have used JWT sign method for access_token.

As frontend I have used separate redux file for state management and used axios for http request.

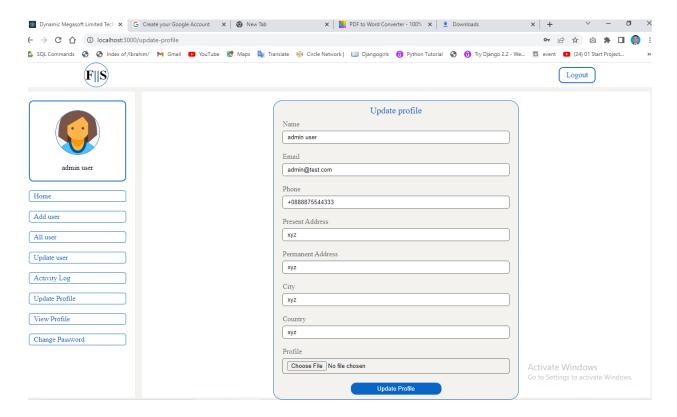
Admin Section:



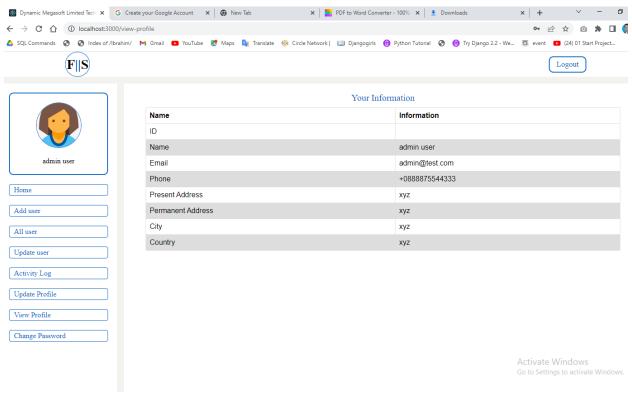
Home page after first signup



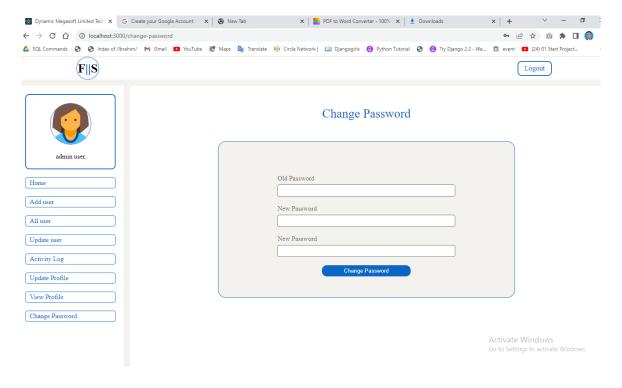
Admin home after change profile



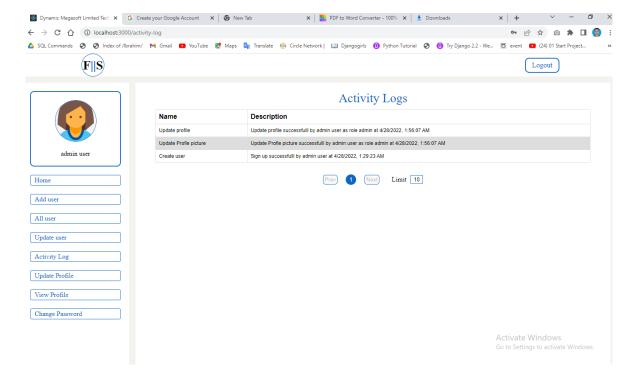
Admin update profile change



Admin view profile

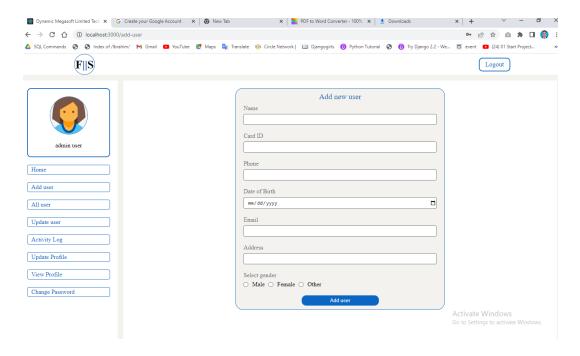


Admin change password



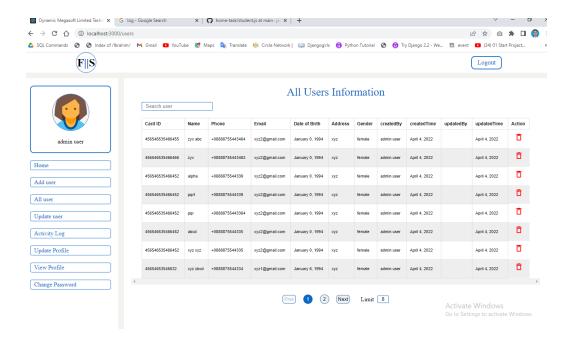
Admin activity log with pagination

This is server side pagination with previous button, next button, jump to particular page, page size



Add new user

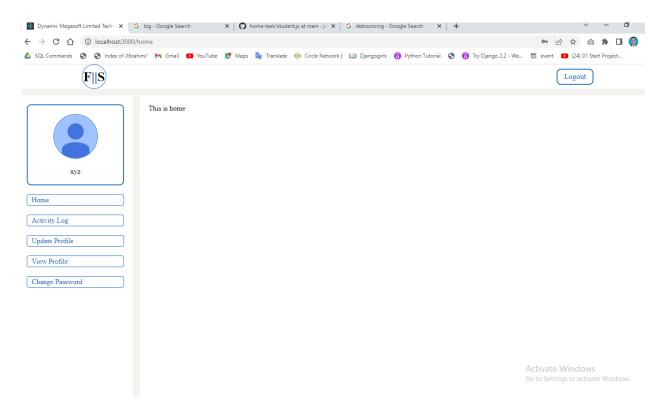
Add new user with name, cardId, phone, date of birth, email, address, gender, created by, created time, updated by, updated time



User list

Admin can see list of user with pagination and search option implement search debouncing. Admin can soft delete a particular user by clicking right side red delete button. After deleting a particular user information, it won't be show to admin but it won't delete from database

User Section:



User home page

User can do some common functionality like admin

- 1. Activity logs
- 2. Update profile
- 3. View profile
- 4. Change password

Project Setup:

Backend setup [Run bellow commond]

git clone https://github.com/tawhidul-islam/technical-test

cd server yarn yarn dev

Frontend setup [Open another terminal to project folder]

cd client yarn yarn dev