



## **IS PROJECT REPORT**

### **Group members :**

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### **Project : User Authentication System**

### **Features : =**

- User will see the signup screen first in which he will enter the details and signup into the system by specifying his/her desired role (Admin / User).

Signup

user1@gmail.com

.....

User

+923368318554

REGISTER

- After the user clicks register button, a success message will be displayed that he has successfully signed up:

```
{"message": "User has been successfully registered"}
```

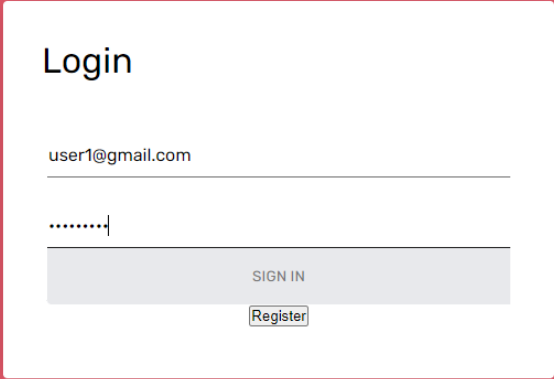
- Entry into the database :

```
{
  "_id": ObjectId('638cd6aac39783123e647eaa'),
  "emailId": "user1@gmail.com",
  "password": "U2FsdGVkX1+SGLBY0RM0bVP9Gx70UD7G1WJj1w9V9tI=",
  "Role": "User",
  "phone": "+923368318554",
  "isVerified": false,
  "verify_code": null,
  "__v": 0
}
```

- The password is encrypted with AES algorithm through a secret key and then saved to the database.

## User Authentication :=

- Now we are logging in with the same user who has signed up to the system above

A screenshot of a login form on a red background. The form is white and titled "Login". It contains two input fields: the first is for email, with "user1@gmail.com" entered; the second is for password, with "....." entered. Below the password field is a grey "SIGN IN" button. Below the "SIGN IN" button is a smaller "Register" button.

Login

user1@gmail.com

.....

SIGN IN

Register

- At this point, we cannot say that a legitimate user is performing the login or not, so for the first login the user has to verify himself

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## Enter code to verify yourself

Your ID : 638cd6aac39783123e647eaa

Your Email : user1@gmail.com

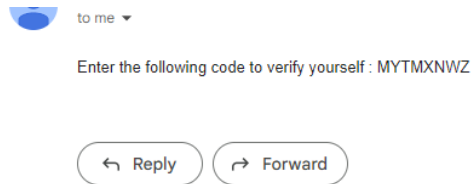
638cd6aac39783123e647ea

Enter code sent to mail

Submit

---

- A random string of code has been generated and sent to the user's email address



## Enter code to verify yourself

Your ID : 638cd6aac39783123e647eaa

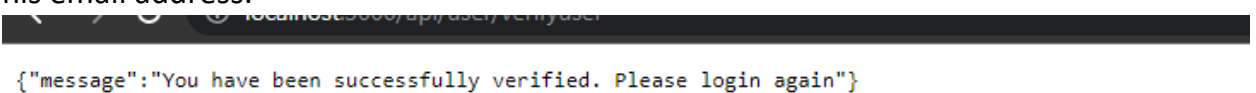
Your Email : user1@gmail.com

638cd6aac39783123e647eaa

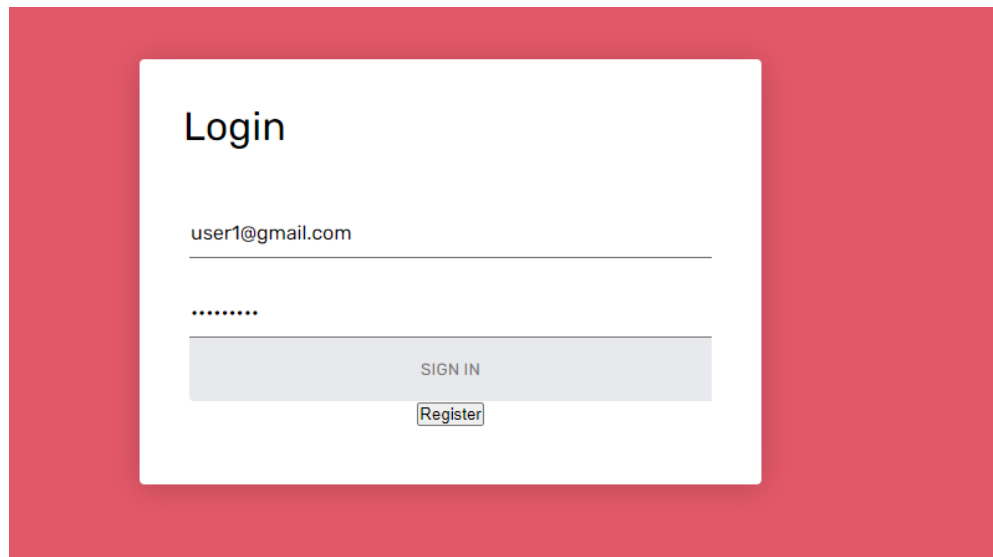
MYTMXNWZ

Submit

- The user has been successfully verified now, by entering the correct code sent to his email address.



- Now we have successfully logged in into the system



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Currently logged in user : user1@gmail.com

[Preview all Users \(ADMIN API\)](#)

[Preview Logged in User Data \(USER API\)](#)

[Reset any user's password \(ADMIN API\)](#)

[Reset Logged in user's password \(USER API\)](#)

### **RBAC ( Role Based Authentication)**

- Those users who have the Role as 'Admin' are only able to access the ADMIN APIS, and vice versa for the 'User' Role.
- **Currently Logged in as a User:**

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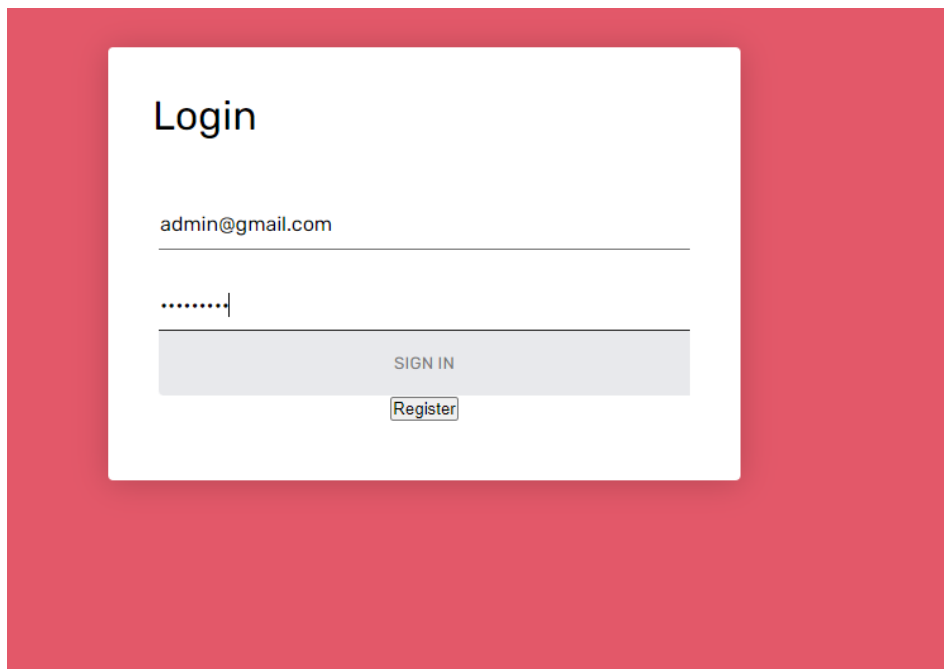
```
{"message": "you must be an admin to access this API"}
```

- 
- If a normal user tries to access the Admin API, he will be shown with the following message above
  - If he accesses, his own api, then he is allowed to access :

```
{"Your Data": {"id": "638cd6aac39783123e647eaa", "email": "user1@gmail.com", "password": "Hassan123", "role_in_system": "User"}}
```

---

- **Currently Logged in as an Admin :**



Login

admin@gmail.com

.....

SIGN IN

[Register](#)

Currently logged in user : admin@gmail.com

Preview all Users (ADMIN API)

Preview Logged in User Data (USER API)

Reset any user's password (ADMIN API)

Reset Logged in user's password (USER API)

- 
- Now, the admin can access all the ADMIN APIS. If he tries to access a USER API, he will be shown an error message :

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```
{"message": "you must be a User to access this API"}
```

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- Admin has the privilege to change any user's password :

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## Enter New Password

userId
New Password
Re-Enter Password
<input type="checkbox"/> Show Password
Submit

---

- The admin has to input the user's id of which he want to modify the password. He can see the ID easily by accessing the API of 'get all user details'

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```
{ "All Users Registered in system": [{"id": "638ccb01142406a813fdc9fd", "email": "user@gmail.com", "password": "Hassan123", "role_in_system": "User"}, {"id": "638cd6aac39783123e647eaa", "email": "user1@gmail.com", "password": "Hassan123", "role_in_system": "User"}]}
```

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- Admin has successfully picked ID of one user

## Enter New Password

638ccb01142406a813fdc9fd

.....

.....

☐ Show Password

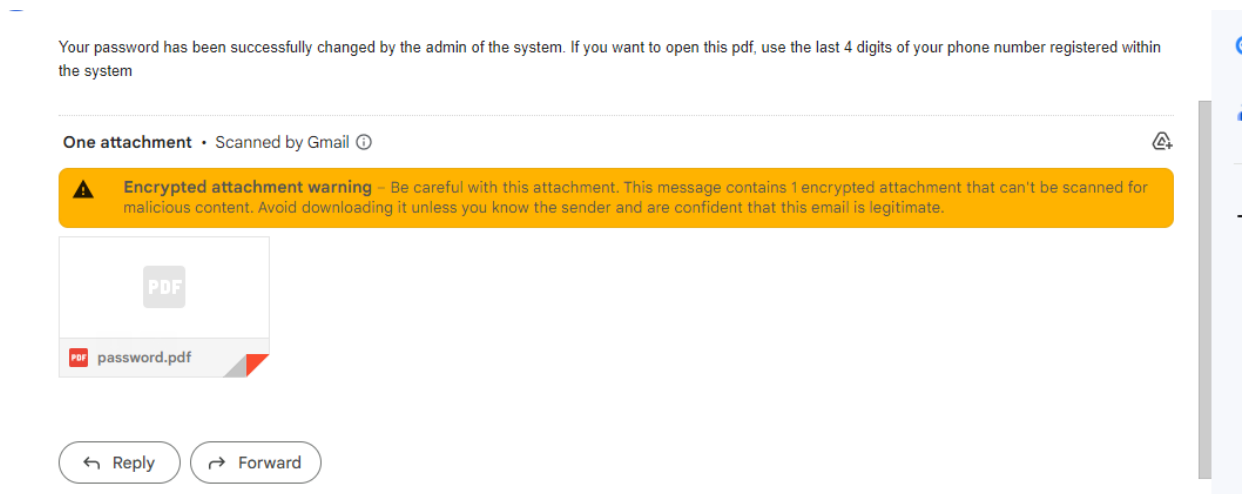
- 
- On clicking submit, the password of that user will be changed successfully, and then user will be notified through an email.
  - The email will be containing a PDF with the new password stored.
  - There are chances that the user's email can also be hacked, so in order to protect from that the pdf will be password protected and can be opened by entering the last 4 digits of the user's phone number which the user had used while signing up into the system.

```
{"message": "Password of this user with email ID user@gmail.com has been successfully updated and user has been notified"}
```

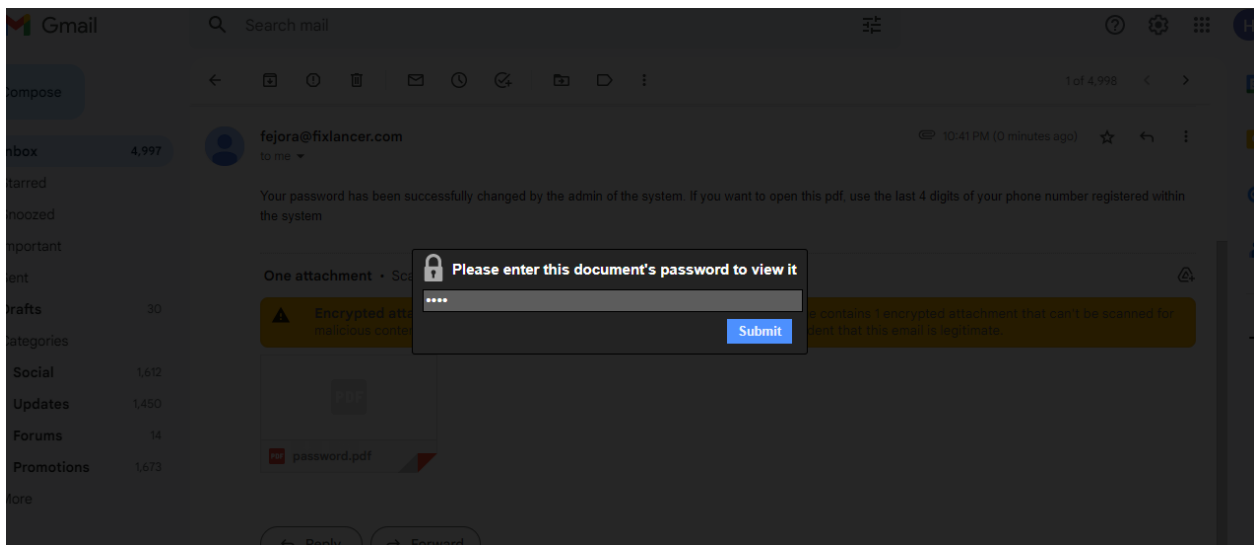
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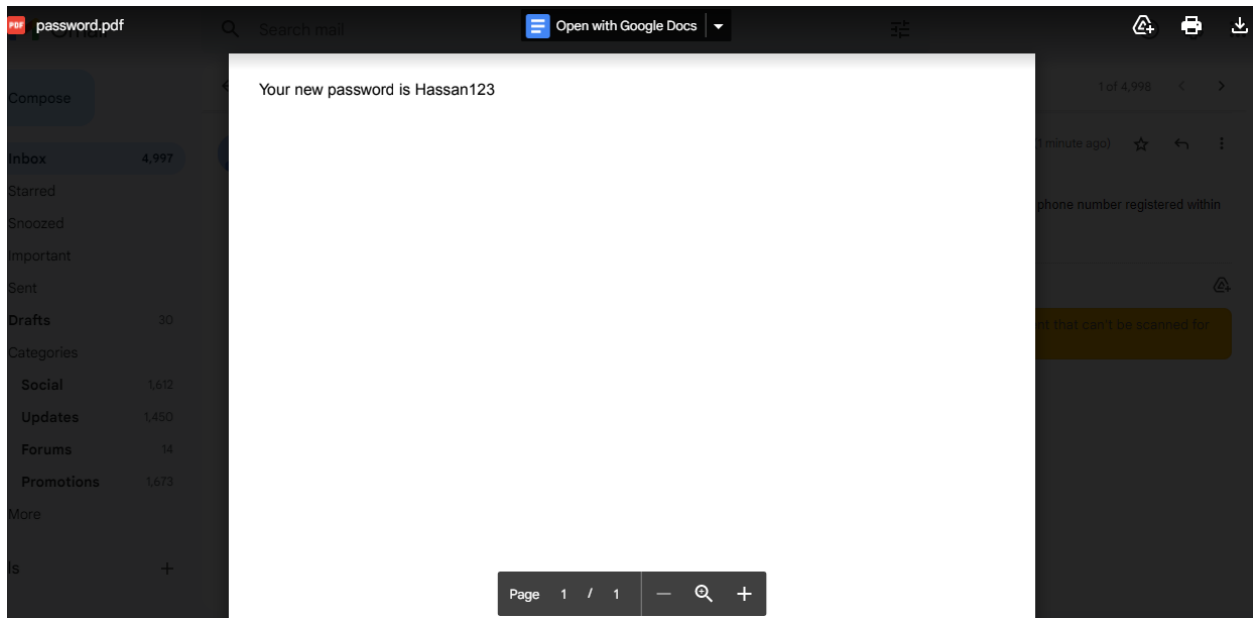
- Email received :



- User can open the pdf by entering the last 4 digits of his registered phone number



- User's new password



- Now the user can easily log in into the system by entering his new password
- Moreover, a logged in user can also change his password

## Enter New Password

Your ID : 638ccb01142406a813fdc9fd

Your Email : user@gmail.com

☐ Show Password

- Success Response :

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```
{"message": "Your password has been updated"}
```

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