User Model

```
import mongoose from 'mongoose';

const UserSchema = mongoose.Schema(
  {
    username:{
      type: String,
      required: true,
    },
    password:{
      type: String,
      required: true,
    },
    firstname:{
      type: String,
      required: true,
    },
    lastname:{
      type: String,
      required: true,
    },
    isAdmin:{
      type: Boolean,
      default: false,
    },
  },
  {timestamps: true}
)

const UserModel = mongoose.model("Users",UserSchema);
export default UserModel;
```

Auth Route

```
import express from 'express';

import { loginUser, registerUser } from '../Controller/AuthController.js';

const router = express.Router();

router.post('/register',registerUser);

router.post('/login',loginUser);

export default router;
```

AuthController

```
import UserModel from "../Models/UserModel.js";

import bcrypt from "bcrypt";


//registering a new user

export const registerUser = async(req,res)=>{

   const { firstname, lastname, username, password} = req.body;

   const salt = await bcrypt.genSalt(10);

   const saltedPassword = await bcrypt.hash(password, salt);

   const newUser = new UserModel({firstname, lastname, username, password: saltedPassword});

   try{

      await newUser.save()

      res.status(200).json(newUser)

   }

   catch(e){

      res.status(500).json({message: e.message});

   }

};

// login user

export const loginUser = async(req,res)=>{

   const {username,password} = req.body;

   try{

      const user = await UserModel.findOne({username: username})

      if(user){
            const validity = await bcrypt.compare(password, user.password)
            validity? res.status(200).json(user): res.status(400).json("Wrong Password")
        }
        else{
            res.status(400).json("User Does not exist")  }   }
    catch(e){
        res.status(500).json({message: e.message});
    }
}
```

User Controller

```
// UserController.js
import User from '../Models/UserModel.js';
// Get user by id
export const getUserById = async (req, res) => {
    try {
        const id = req.params.id;
        console.log(`User id [${id}]`);
        const user = await User.findOne({ _id: id });
        if (user) {
            return res.status(200).send({
                body: user
            });
        } else {
            return res.status(404).send({
                body: "",
                message: `User does not exist [id=${id}]`
            });
        }
    } catch (error) {
        console.error('Error fetching user:', error);
        return res.status(500).send({
            body: "",
            message: `Error in fetching user\n${error}`
        });
    }
}
// Create a new user
export const createUser = async (req, res) => {
    try {
        const { username, email, password } = req.body;
        console.log(`User [username=${username}, email=${email}, password=${password}]`);
        const userFromDB = await User.findOne({ email: email });
        if (userFromDB) {
            return res.status(400).send({
                message: "User already exists"
            });
        } else {
            const newUser = new User({
                username,
                email,
                password
            });
            const user = await newUser.save();
            return res.status(201).send({
                body: user,
                message: `User created successfully`
            });
        }
    } catch (error) {
        console.error('Error creating user:', error);
        return res.status(500).send({
            body: "",
            message: `Error in creating user\n${error}`
        });
    }
}

// Update user by id
export const updateUser = async (req, res) => {
    try {
        const { id } = req.params;
        const { username, email, password } = req.body;
        console.log(`User [id=${id}, username=${username}, email=${email}, password=${password}]`);
        const updatedUser = await User.findByIdAndUpdate(id, { username, email, password }, { new:
true });
        if (updatedUser) {
            return res.status(200).send({
                body: updatedUser,
                message: `User updated successfully`
            });
        } else {
            return res.status(404).send({
                body: "",
                message: `User not found`
            });
        }
    } catch (error) {
        console.error('Error updating user:', error);
        return res.status(500).send({
            body: "",
            message: `Error in updating user\n${error}`
        });
    }
```

```
}


// Delete user by id
export const deleteUser = async (req, res) => {
  try {
    const { id } = req.params;


    const deletedUser = await User.findByIdAndDelete(id);


    if (deletedUser) {
      return res.status(200).send({
        body: "",
        message: `User deleted successfully`
      });
    } else {
      return res.status(404).send({
        body: "",
        message: `User not found`
      });
    }
  } catch (error) {
    console.error('Error deleting user:', error);
    return res.status(500).send({
      body: "",
      message: `Error in deleting user\n${error}`
    });
  }
}
```

Delete User Route

```
import express from 'express';

import User from '../Models/UserModel.js';
```

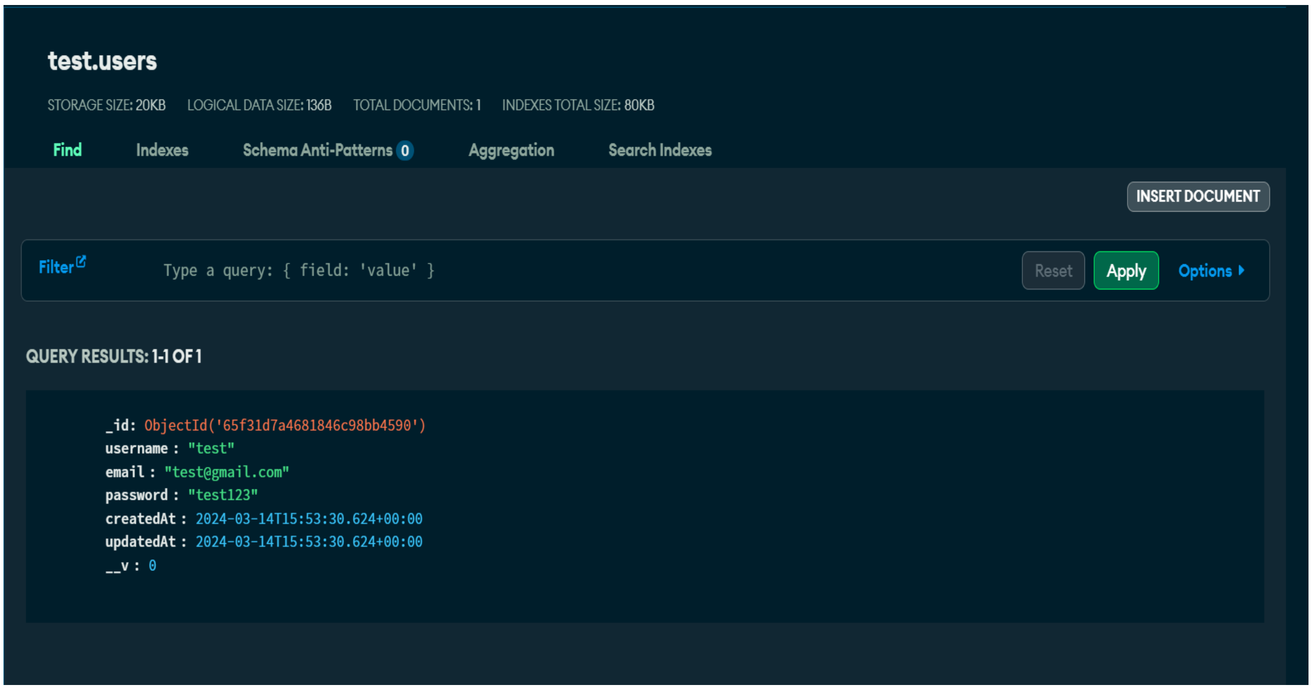
```
const router = express.Router();

router.delete("/", async (req, res) => {
  const { username } = req.body;
  try {
    const deletedUser = await User.findOneAndDelete({ username: username });
    if (!deletedUser) {
      return res.status(404).json({ error: 'User not found' });
    }
    res.json({ message: 'User deleted successfully' });
  } catch (err) {
    console.error('Error deleting user:', err);
    res.status(500).json({ error: 'Internal server error' });
  }
});
export default router;
```

Update User Route

```
import express from 'express';
import User from '../Models/UserModel.js';
const router = express.Router();
router.put("/:username", async (req, res) => {
  const { username } = req.params;
  const { email, password } = req.body;
  try {
    const user = await User.findOne({ username: username });
    if (!user) {
      return res.status(404).json({ error: 'User not found' });
    }
    user.email = email || user.email;
    user.password = password || user.password;
    const updatedUser = await user.save();
    res.json(updatedUser);
  } catch (err) {
    console.error('Error updating user:', err);
    res.status(500).json({ error: 'Internal server error' });
  }
});

export default router;
```



```
_id: ObjectId('65f31d7a4681846c98bb4590')
username : "test"
email : "test@gmail.com"
password : "test123"
createdAt : 2024-03-14T15:53:30.624+00:00
updatedAt : 2024-03-14T15:53:30.624+00:00
__v : 0
```