

Project: Figure Annotation (Project 1)

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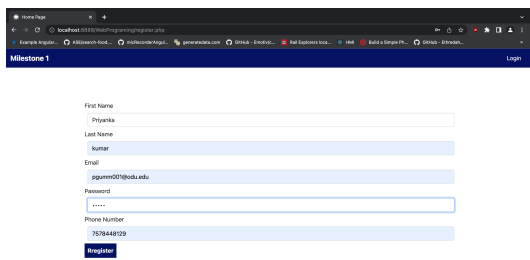
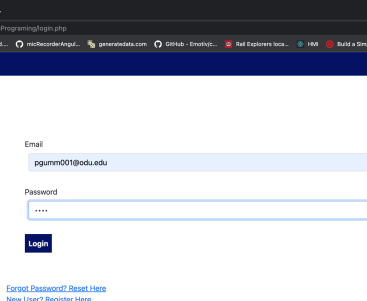
Student UIN: 01125294

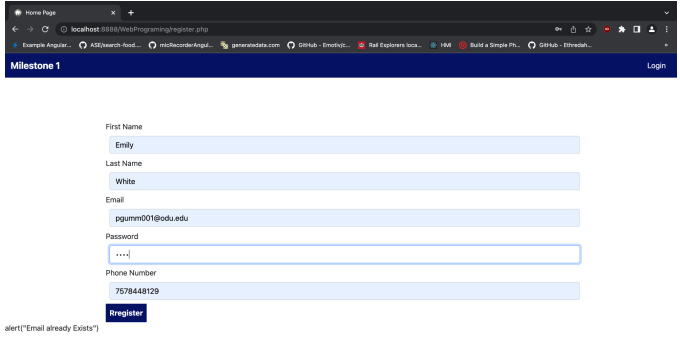
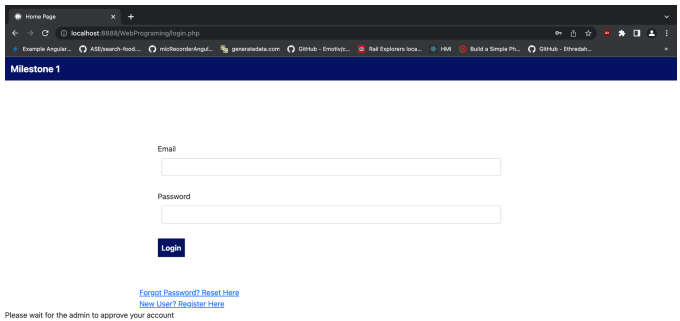
1. Overview

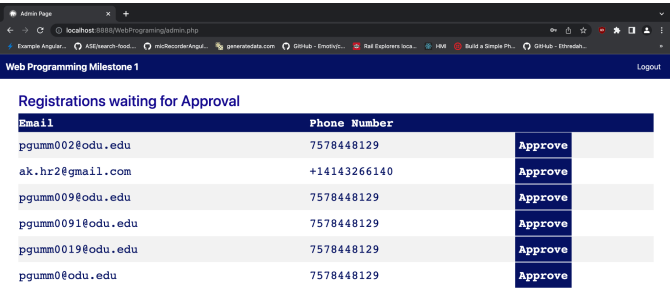
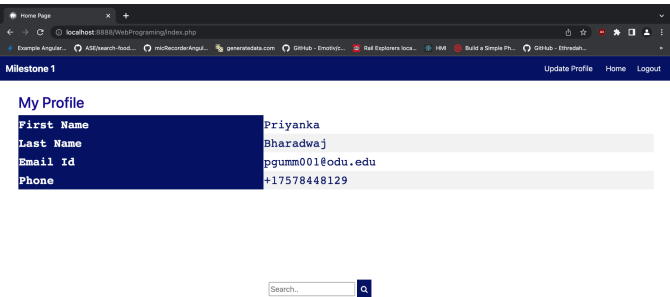
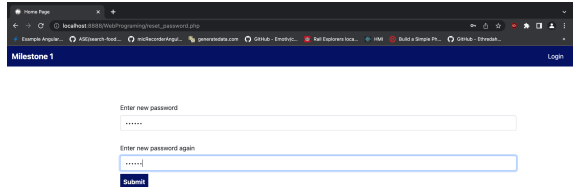
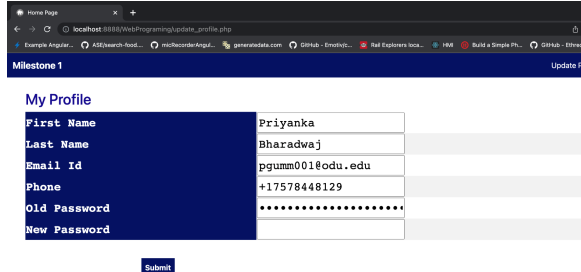
The goal of the Project is to build a web-based Figure annotation interface. I have used HTML , CSS with Bootstrap, Javascript and PHP to build the project and MySQL as the Database.

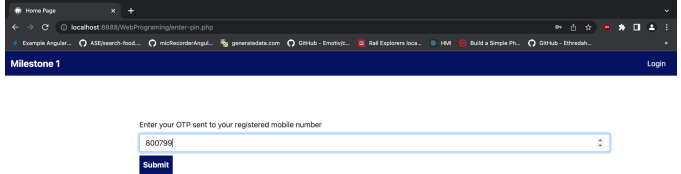
2. Milestone Accomplishments

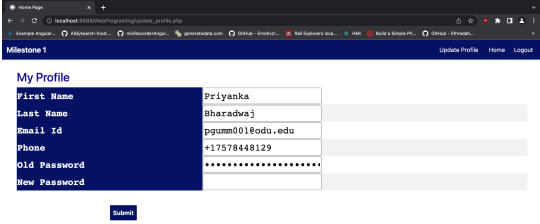
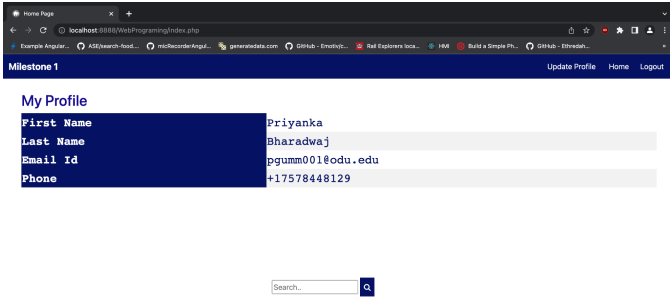
Table 1: Status of milestone specifications.

Fulfilled	Feature#	Specification	Screenshots
Yes	1	Users should be able to register new accounts using email addresses	
Yes	2	Users are identified by email address.	

Yes	3	Password must be encrypted before storing in the database.	
Yes	4	Users cannot register duplicate accounts using the same email address.	
Yes	5	An admin user should be created from the	
Yes	6	Users cannot log in to the system until their requests are approved by the admin.	

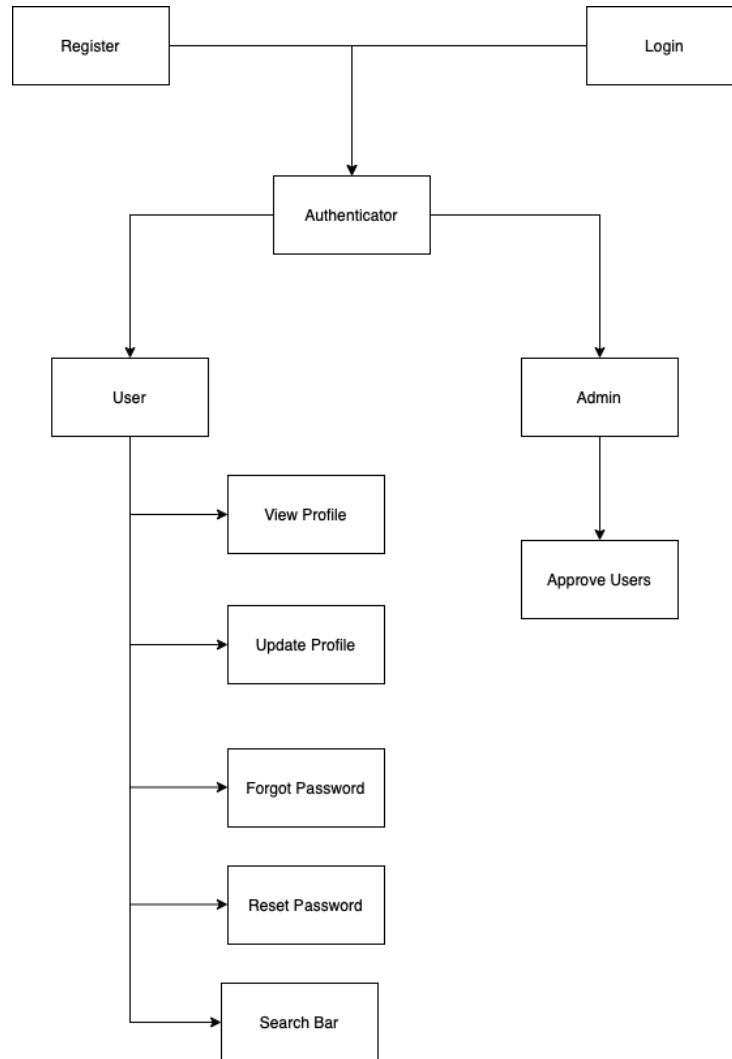
Yes	7	An admin user has a different view from a regular user: it can approve users	
Yes	8	Users should be able to log into your website using the accounts they registered.	
Yes	9	Users should be able to reset their passwords if they forget it.	
Yes	10	Users should be able to change their passwords after they login.	

Yes	11	<p>A 2-factor-authentication should be used when a user attempt to login. This can be done by email, phone text, or a DUO push. You can implement one of them.</p>	 
Yes	12	<p>The website should have a homepage for each user, where they can view their profiles, change passwords, and update information.</p>	

			
Yes	13	The website should provide a search box at the landing page (after logging in). The searching function may not be working at this stage, and there should be a search button next to the search box.	

3. Architecture

The project has been developed in HTML and CSS framework using PHP and MySQL as the database. The project has the landing page which will have the login option for the user. Once the user signs in based on the credentials he will either be directed to the admin page or the user page.



1. Registration:

Every user is uniquely identified by the email ID they use to register to the application. There cannot be two users who can register with the same email address and if they try to do so there will be an error thrown at the time of registration. We also collect user information like name, phone number during the registration. Once the user creates his account he can login and to provide extra security I have used text message with an OTP to provide two factor authentication. For the very first login after registration the user needs to be approved by the admin before he can start using the application. Once the admin has approved the account user will be able to log into the application.

Home Page x +

localhost:8888/WebPrograming/register.php

Example Angular... ASE/search-food... micRecorderAngul... generatedata.com GitHub - Emotiv/c... Rail Explorers loca... HMI Build a Simple Ph... GitHub - Ethredah...

Milestone 1 Login

First Name

Priyanka

Last Name

kumar

Email

pgumm001@odu.edu

Password

.....

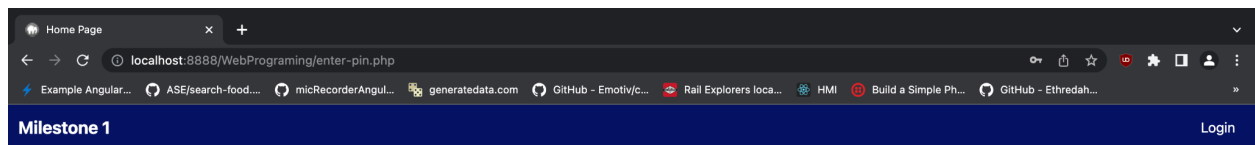
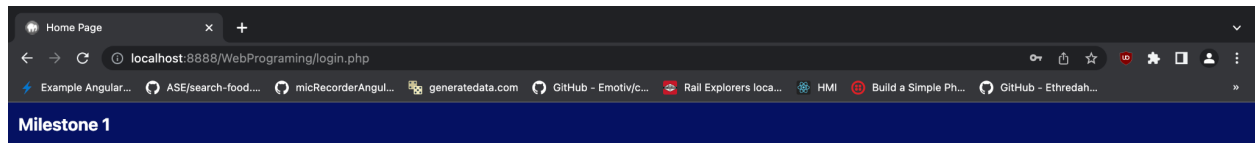
Phone Number

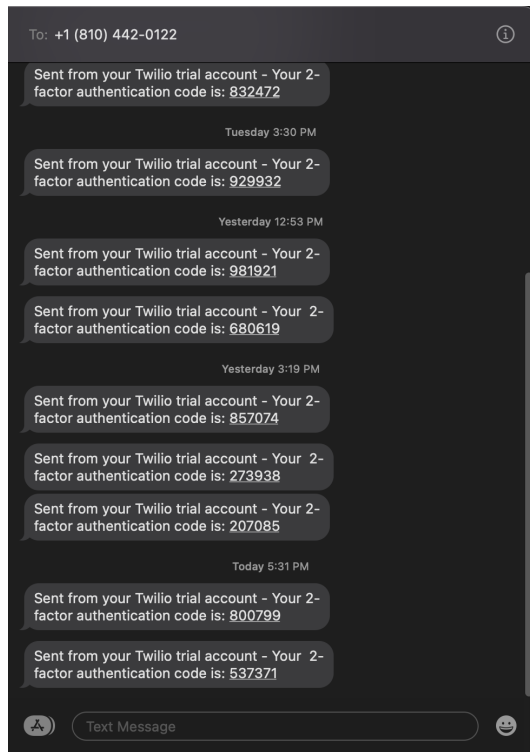
7578448129

Register

2. Login:

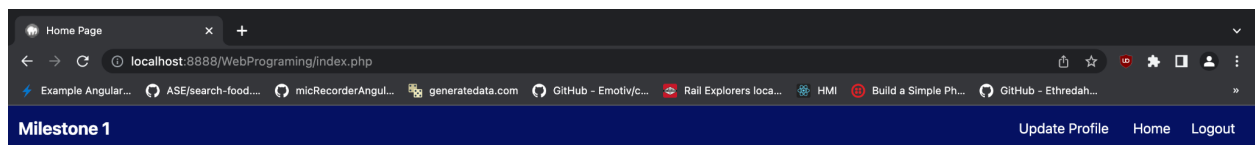
Once a user has created his account and has been approved by the admin he can log into the application whenever he wishes using the email ID he registered with and the password he said at the time of the registration. Every time the user tries to login, after he has successfully entered the correct password he will receive an OTP to the mobile number he used at the time of registration. The OTP is a six Digit number that will be randomly generated and sent to the user as in text message. Once the user has entered the correct OTP he will be redirected to his homepage where he will be able to find the search bar, the nav bar that gives him options to view and update his profile.





3. View Profile :

This page shows the user his details like first name, last name, email ID, phone number he used to create his account during registration..



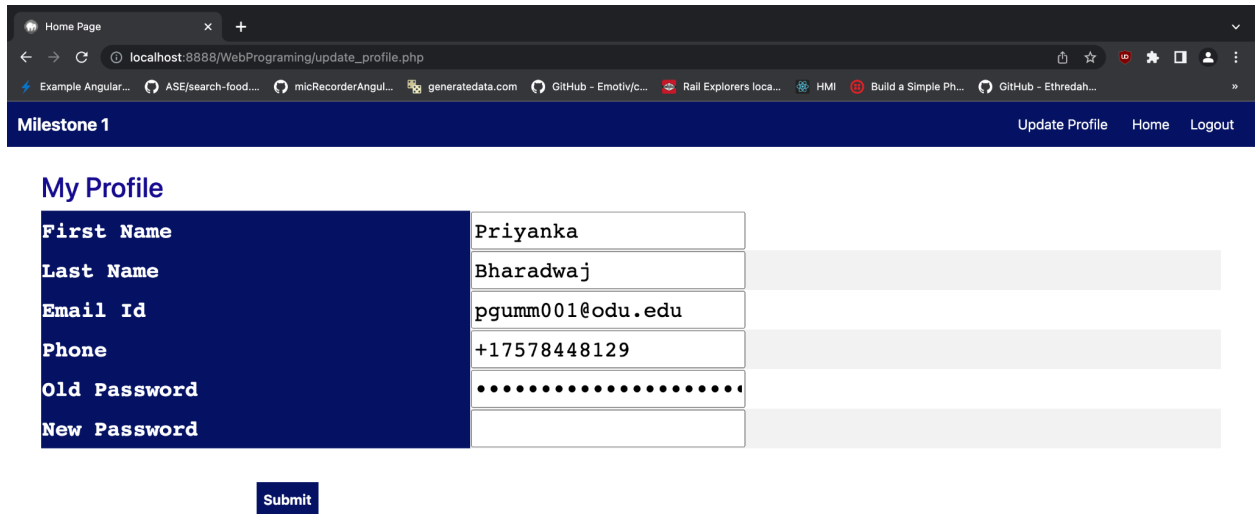
My Profile

First Name	Priyanka
Last Name	Bharadwaj
Email Id	pgumm001@odu.edu
Phone	+17578448129

Search..

4. Update Profile:

The User can update his details such as first name, last name, phone number, and password. the user will not be allowed to change his email ID since it is the unique identifier for every user.



My Profile	
First Name	Priyanka
Last Name	Bharadwaj
Email Id	pgumm001@odu.edu
Phone	+17578448129
Old Password
New Password	

Submit

5. Reset Password

Once a user successfully logs in He will be able to view and update his profile which also includes the feature that allows him to reset his current password .Once he reset his password he will have to use the new password to login from the next time onwards.

Home Page x +

localhost:8888/WebPrograming/update_profile.php

Example Angular... ASE/search-food... micRecorderAngul... generatedata.com GitHub - Emotiv/c... Rail Explorers loca... HMI Build a Simple Ph... GitHub - Ethredah...

Milestone 1 Update Profile Home Logout

My Profile

First Name	Priyanka
Last Name	Bharadwaj
Email Id	pgumm001@odu.edu
Phone	+17578448129
Old Password
New Password

Submit

6. Forgot Password

In cases where the user has forgotten his login password there is an option for him to reset a new password without having to login. For this the user will have to input his email ID he used to create his account as this is his identifier and once the email ID has been verified to exist in the database he will be sent an OTP to his registered mobile number and once he enters the correct OTP he will be redirected to a forgot password page where he can reset his password. Once he has Changed his password he will have to login with his new password.

Home Page x +

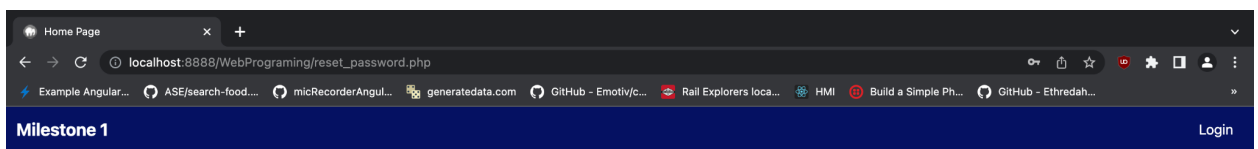
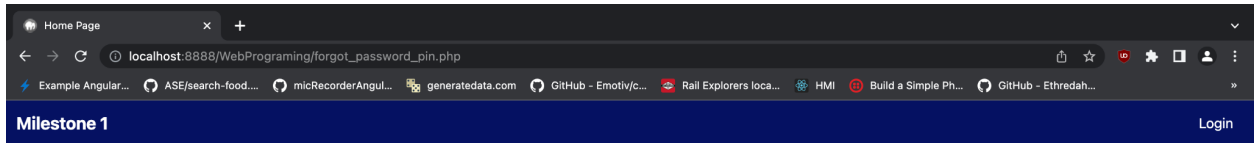
localhost:8888/WebPrograming/forgot_password.php

Example Angular... ASE/search-food... micRecorderAngul... generatedata.com GitHub - Emotiv/c... Rail Explorers loca... HMI Build a Simple Ph... GitHub - Ethredah...

Milestone 1 Login

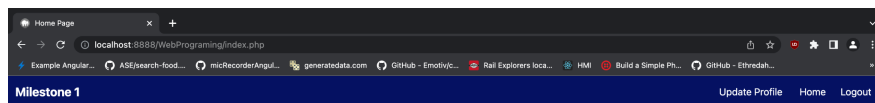
Enter your Email

Submit



7. Search Bar

On the landing page of a user he will be able to view his personal details and also a search bar which is currently non functional



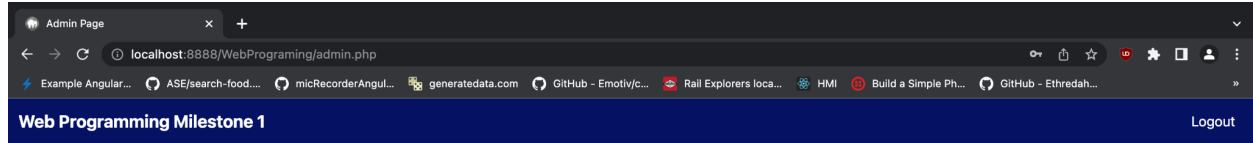
My Profile

First Name	Priyanka
Last Name	Bharadwaj
Email Id	pgumm001@odu.edu
Phone	+17578448129

Search..

8. Admin Page:

The admin will have to login using the same login page as any user and wants his credentials has been verified he will be redirected to his homepage which will show all the new registrations that are waiting for his approval. Once the admin approves the newly created registrations, The new account will be activated and the users will be able to login and use the application.



Registrations waiting for Approval

Email	Phone Number	
pgumm002@odu.edu	7578448129	Approve
ak.hr2@gmail.com	+14143266140	Approve
pgumm009@odu.edu	7578448129	Approve
pgumm0091@odu.edu	7578448129	Approve
pgumm0019@odu.edu	7578448129	Approve
pgumm0@odu.edu	7578448129	Approve

4. Database Design

The Database is created in MySQL. The Primary Key is an integer field called "ID" which is autogenerated. The password is hashed and stored in the database. The role defines if a user is an admin or not. The value 1 means he is an admin and 0 means he is a normal user. The field "Approved" will show if he user has been approved by the admin or not. "1" means he has been approved and "0" means he has not.

User Row

Field	Type	Key	Example
Id	INT AUTO INCREMENT	Primary	1
First_Name	VARCHAR(30)		John
Last_Name	VARCHAR(30)		Smith
Email_ID	VARCHAR(30)		Johns@gmail.com
Password	VARCHAR(30)		\$2b\$10\$.ARaV0krNSjlEBh3ojAfwuslYnTbow OfOskW3BZWlGcMOUmakR73a
Role	INT		0
Approved	INT		1

Admin Row

Field	Type	Key	Example
Id	INT AUTO INCREMENT	Primary	2
First_Name	VARCHAR(30)		Jane
Last_Name	VARCHAR(30)		Doe
Email_ID	VARCHAR(30)		admin@gmail.com
Password	VARCHAR(30)		\$2b\$10\$.ARaV0krNSjlEBh3ojAfwuslYnTbow OfOskW3BZwlGcMOUmakR73a
Role	INT		1
Approved	INT		1

5. Implementation

Register:

Every new user will first have to create an account in the application in order to use it. To register hw will have to provide his information like First Name, Last name , Email Id , valid phone number and set a password.

No two users can register using the same email id and if an attempt is made to do so an error message will be shown and the registration will not be completed.

Once the user registers , he will have to wait to get an approval from the admin befor he can login to the application and start using it. Once the admin approves it , he can login to the application.

Login and Authentication:

The login page has two fields, the first one to enter the email ID and the second one to enter the password. Once the user credentials have been verified with the database, he will be sent an OTP with a six digit code to enter in through the website. Once the user enters the correct OTP, He will be redirected to his homepage where he will be able to view, update his personal data. The user will also be able to find a search bar in his homepage. The login is verified with the password that is hatched and stored in the database. Twilio is being used to send OTPs to the registered user numbers for the two factor authentication. The six digit code is first generated and stored in the database and also sent to the user at the same time. A user is asked to enter the OTP and is compared against the stored OTP in the database if a match is found he is logged in successfully and will be redirected to his landing homepage. If not an error message is thrown and the user will be asked to enter the correct OTP again.

The code for login is in Login.php file

Below is the validation snippet

```
<?php
ini_set('display_errors', '1');
ini_set('display_startup_errors', '1');
error_reporting(E_ALL);
session_start();
include('config.php');
require_once "vendor/autoload.php";
use Twilio\Rest\Client;

$conn = new mysqli($server, $sqlUsername, $sqlPassword, $databaseName);
$cid = "AC7f7fa9bd5fe0c3b2169498125b4fcb0f";
$token = "9a4966c37c0375a3ce3cf5f92d9c37";

if (isset($_POST["login"]))
{
```

```

$email = $_POST["email"];
$password = $_POST["password"];
$sql = "SELECT * FROM USERS WHERE email = '$email'";
$result = mysqli_query($conn, $sql);

if (mysqli_num_rows($result) > 0)
{
    $row = mysqli_fetch_object($result);
    if($row->approved==1){
        if (password_verify($password, $row->password))
        {
            if($row->isadmin == 1){
                $row->is_verified = true;
                $_SESSION["user"] = $row;

                header("Location: admin.php");
            }
            else
            {

                $row->is_verified = false;
                $_SESSION["user"] = $row;
                $pin = rand(0, 9) . rand(0, 9) . rand(0, 9) . rand(0, 9) . rand(0, 9) . rand(0, 9);

                $sql = "UPDATE USERS SET pin = '$pin' WHERE id = " . $row->id . " ";
                mysqli_query($conn, $sql);

                $client = new Client($sid, $token);
                $client->messages->create(
                    $row->phone, array(
                        "from" => "+18104420122",
                        "body" => "Your 2-factor authentication code is: " . $pin
                    )
                );

                header("Location: enter-pin.php");
            }
        }
    }
    else
    {
        echo "Wrong password";
    }
}
else
{
    echo "Please wait for the admin to approve your account";
}

}
else
{
    echo "Not exists";
}

}
?>

```

The Code firsts checks if the User exists by validating the email address. Once that is done it checks if his account has been approved by the admin and if yes he will be redirected to enter the OTP (enter-pin.php) If not he will be asked to wait till he receives admin's approval

Profile View and Update:

The user after logging in will be redirected to his homepage where he will be able to see his personal information he used to register and create his account and he will also have the option to update the information and also reset the current password.

The code is in Index.php and update can be found in Update_profile.php

Forgot Password

If a user forgets his password there is an option to reset it. He will have to enter his registered email id and once that is validated he will receive an OTP to his registered email id and once the OTP is validated he will be able to reset his password.

code used to update the profile

```
$sql = "Update USERS set phone = '$phone' , password = '$password',First_name = '$fname',Last_name='$lname' where id ='$user'";
```

Admin

The admin will have to login using the same login page as any user and once his credentials have been verified he will be redirected to his homepage which will show all the new registrations that are waiting for his approval. Once the admin approves the newly created registrations, The new account will be activated and the users will be able to login and use the application.

```
<script>
function approveFunction(id) {
    console.log("approve called",id);
    var app = id;
    Swal.fire({
        title: 'Do you want to Approve the user?',
        showDenyButton: false,
        showCancelButton: true,
        confirmButtonText: 'Approve',
        denyButtonText: `Don't Approve`,
    }).then((result) => {
        if (result.isConfirmed) {
            $.ajax({

                url : 'approve.php',
                type : 'POST',
                // dataType: 'json',
                data:{id:app},
                success : function (result) {
                    console.log (result); // Here, you need to use response by PHP file.
                },
                error : function () {
                    console.log ('error');
                }

            });

            Swal.fire('Approved!', "", 'success')
            location.reload();
        } else if (result.isDenied) {
```



```
        Swal.fire('User not Approved', '', 'info')
      }
    })

  }
</script>
```