# LOGIN SYSTEM

By,

-Joshua David

-Jai Suriya P K

-Kabilan J

Myself(Joshua), Kabilan and Jai Suriya of CSE-B(2nd year) have created the Login System for the Techathon prelims.

We created a multi-user, multi-role login system along with forget password functionality. In-case if a user forgets their password, all they have to do is to click a link and enter their email and an OTP will be sent to their mail to reset the password for their account.

The below attached images are the images of the Login Screen and the Register Screen. The default route (/) will redirect automatically to the (/login) route.
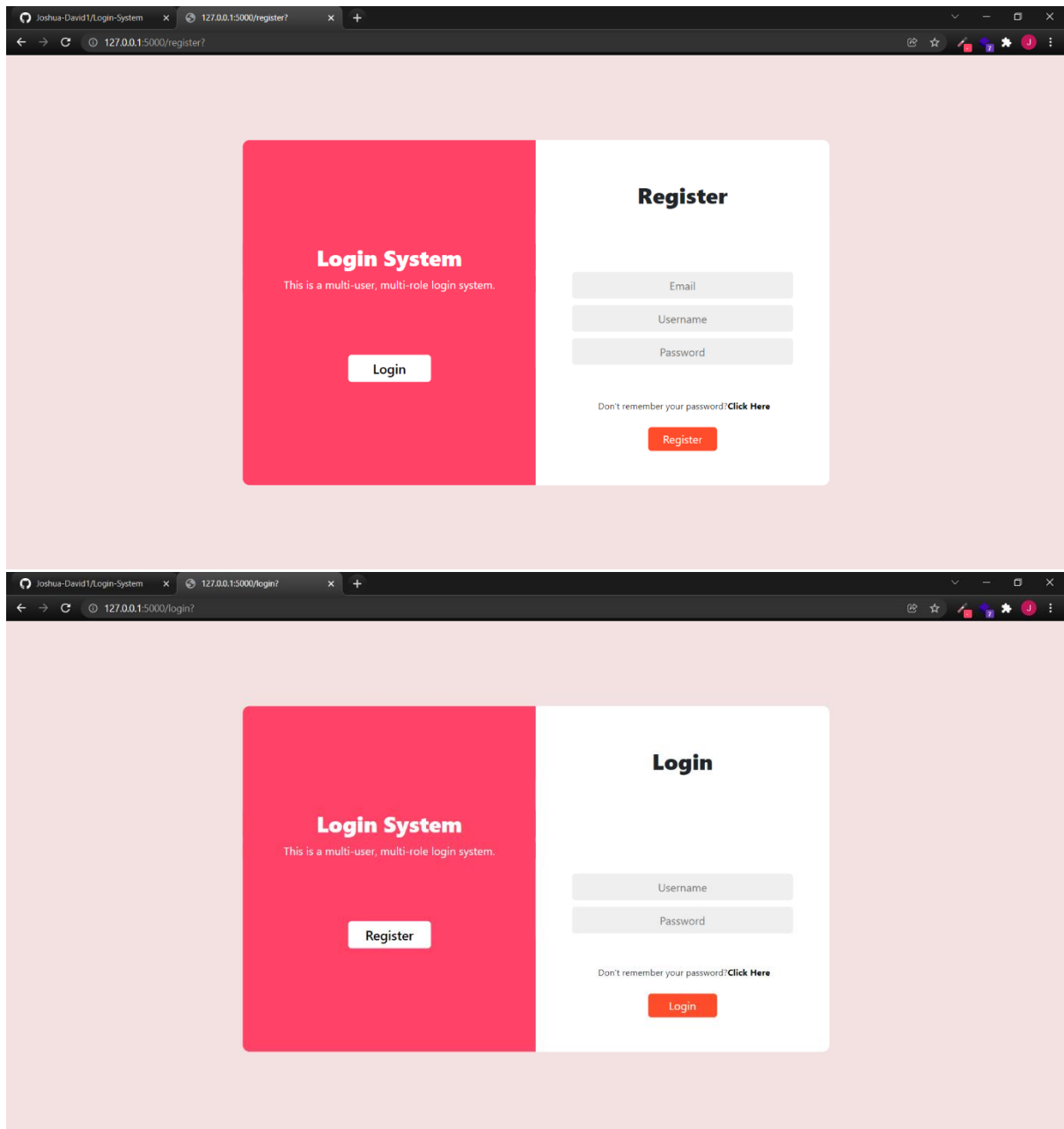
For this example we're gonna be registering a user with college mail addres(200701107@rajalakshmi.edu.in) along with the username (joshua) and password as (joshua). So email->200701107@rajalakshmi.edu.in, username -> joshua, password -> joshua.
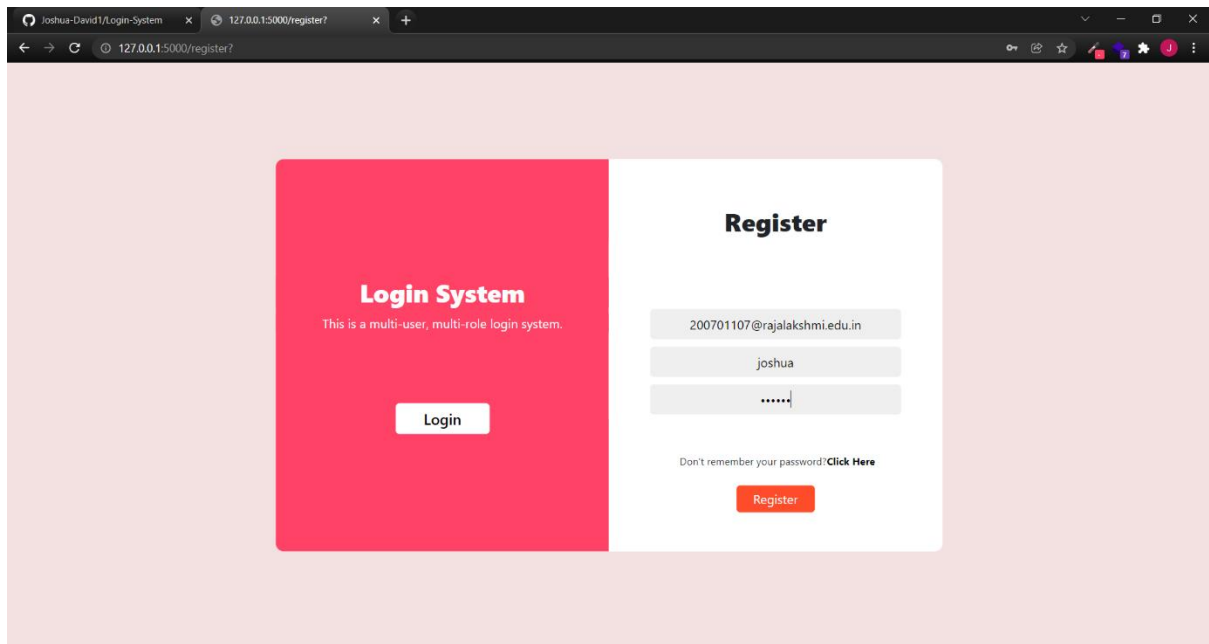
NOTE: If you already have an account and want to login, you can click on the Login button on the left side of the page as seen from above. We've implemented Usernames, passwords and emails with certain validations like (minimum 6 characters, username cannot start with numbers and usernames cannot have any special characters except underscores).

We've entered all the credentials and now it's time to register the user. Once after clicking register button, we'll be re-directed to the '/welcome' route.
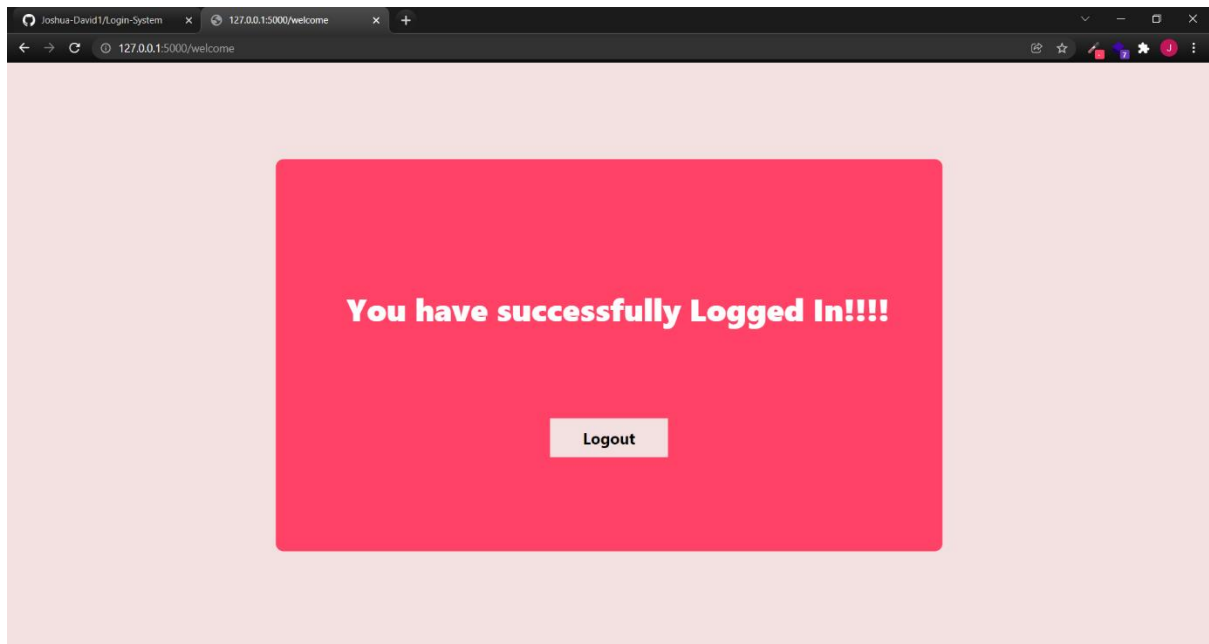
Now, we're gonna be logging out and then logging-in back with the help of
forget password functionality. After logging out we'll be back to the login
screen. By clicking the **Click Here** button at the bottom right conner, We'll be
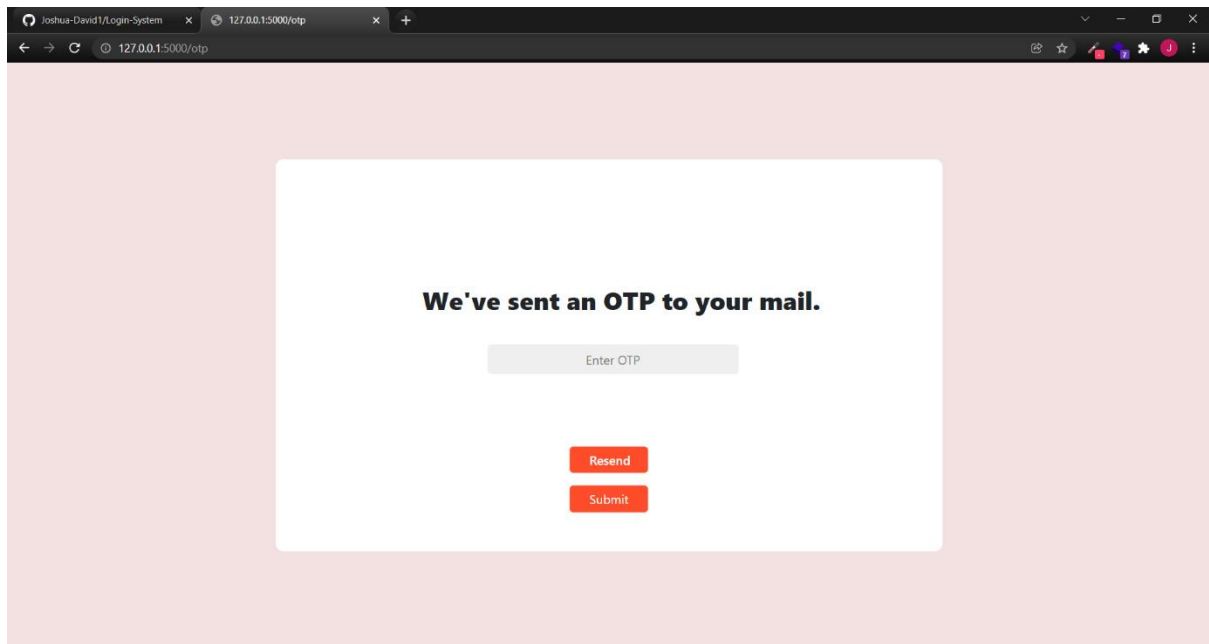redirected to the **/forget-password** route.
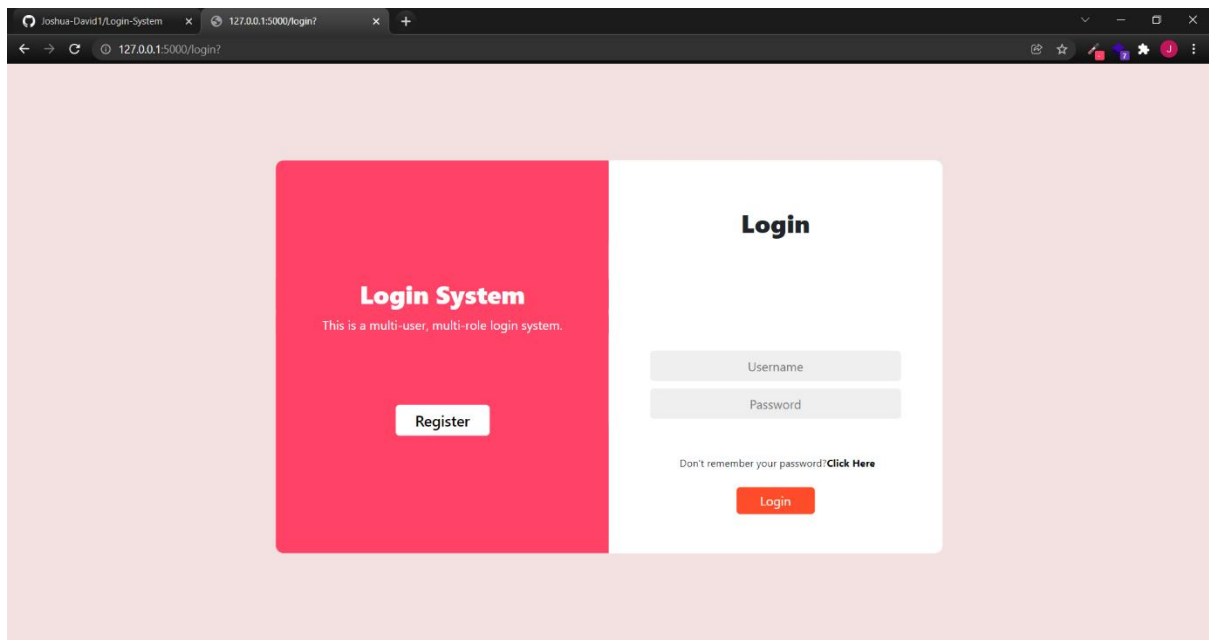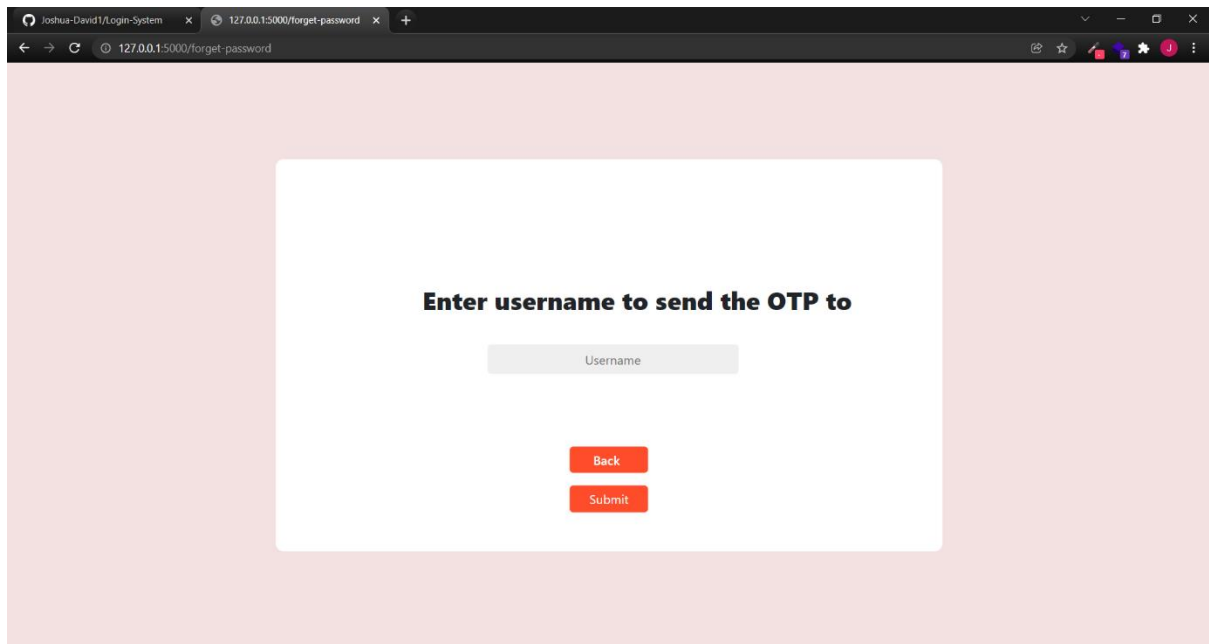
Here we have to enter the username of the account we want to reset the password to. In this example we'll enter theusername as **joshua.**
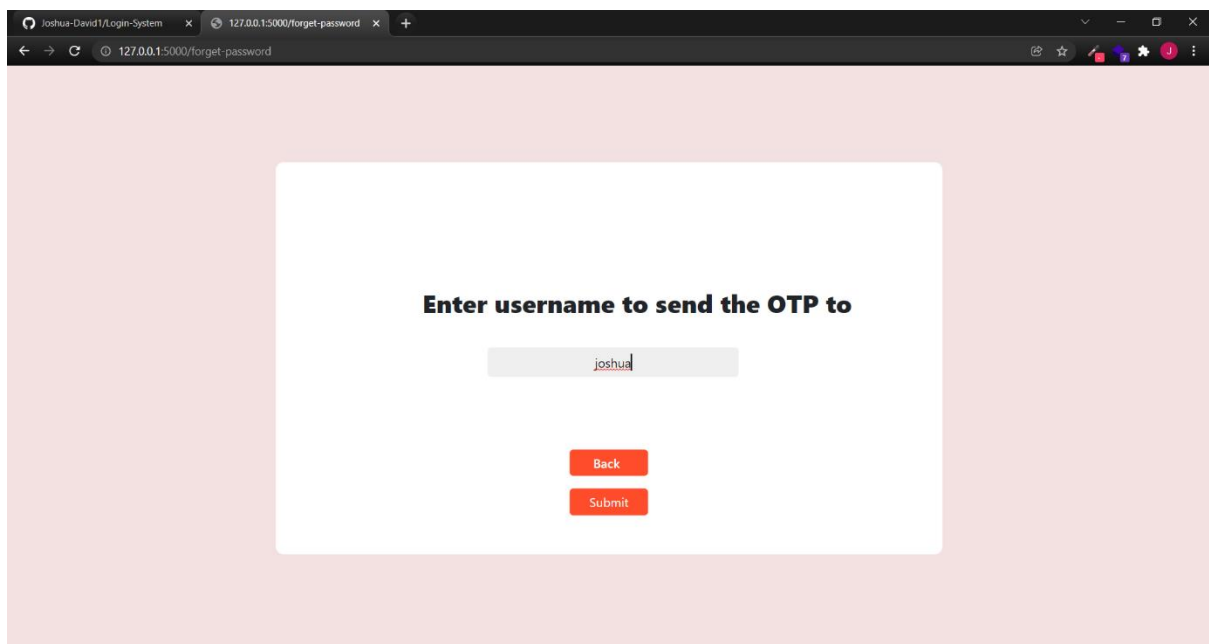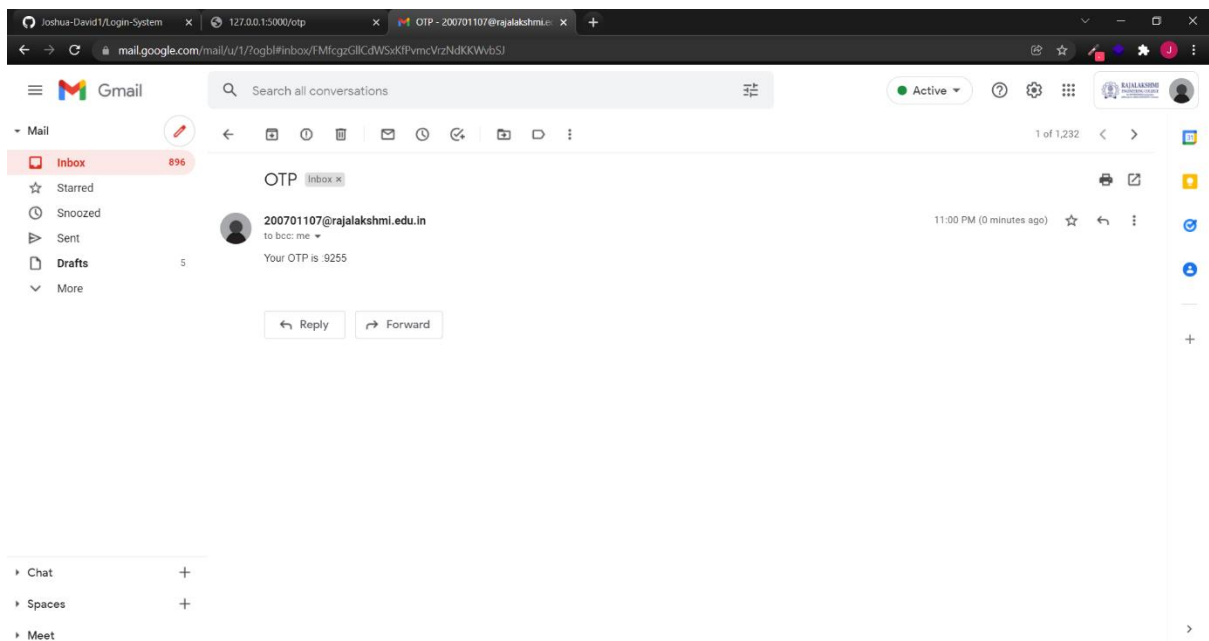

By, clicking submit , an **OTP** will be sent to the email address (200701107@rajalakshmi.edu.in) associated with username(joshua).
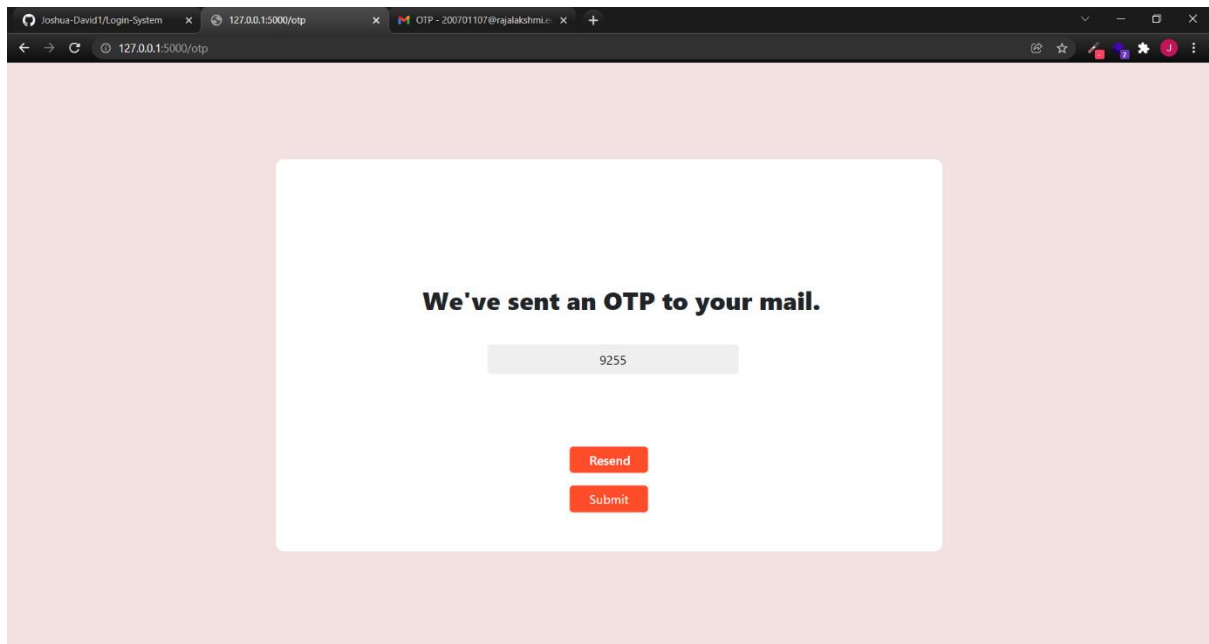
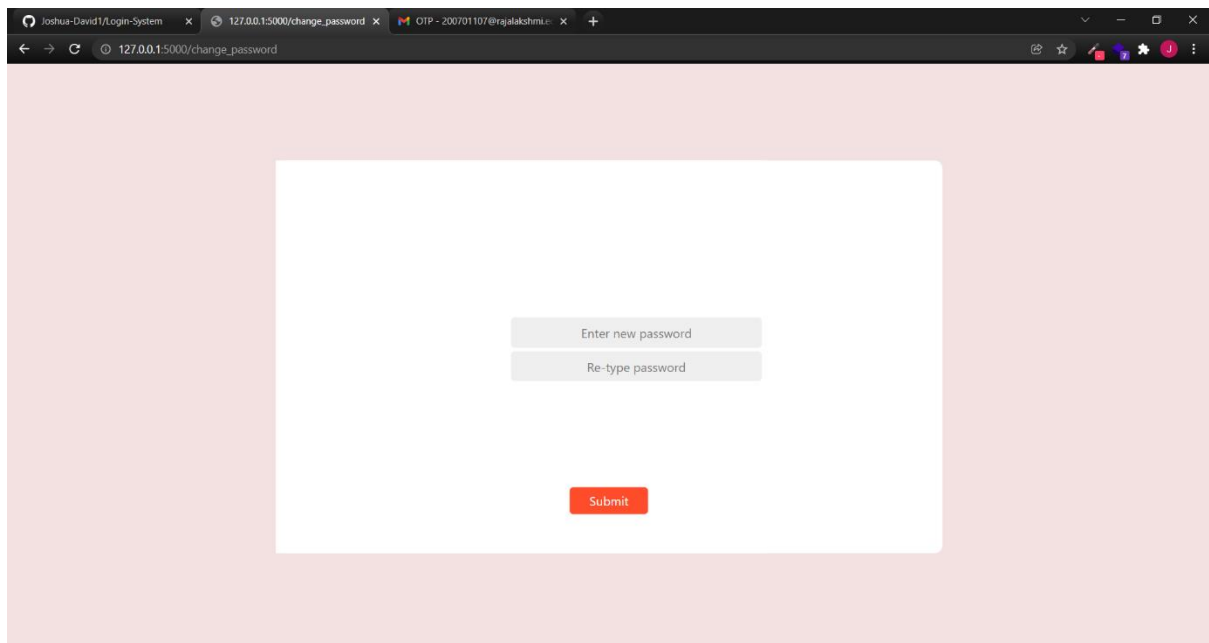We'll be redirected to **/otp** route.

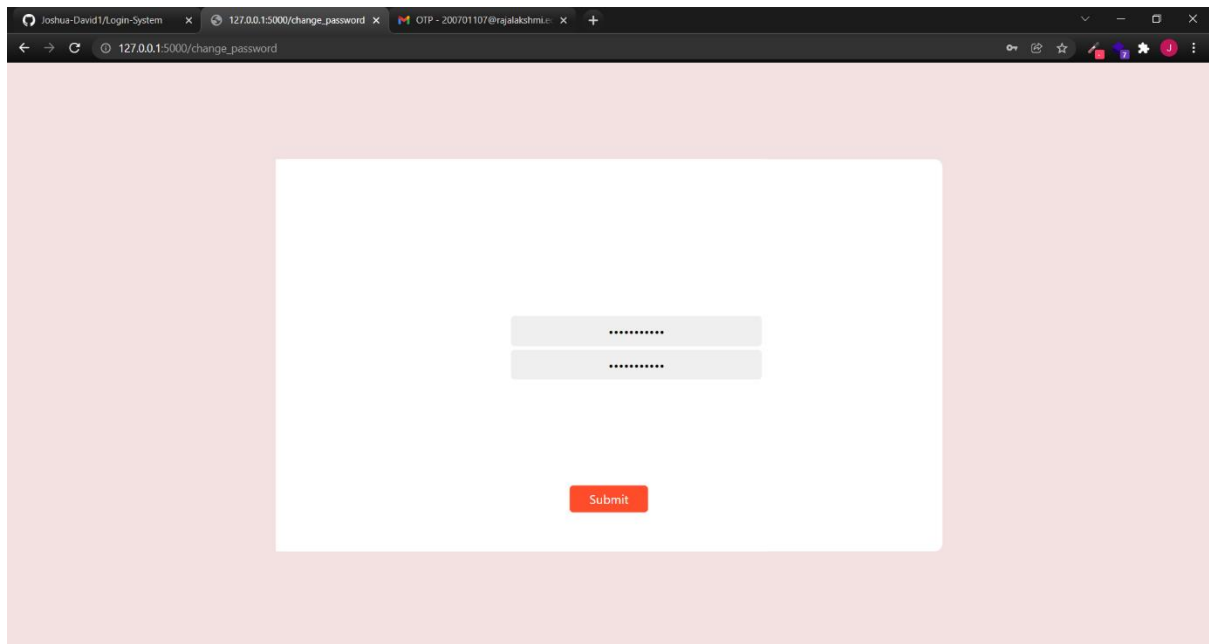Now we have to enter the otp which was sent to the mail.

The otp is 9255 as you can see from above.

Once typing the otp , we'll be redirected to the **/change-password** route where we can change the password.

We'll set the new password to **abcde123456** and then confirm the password.
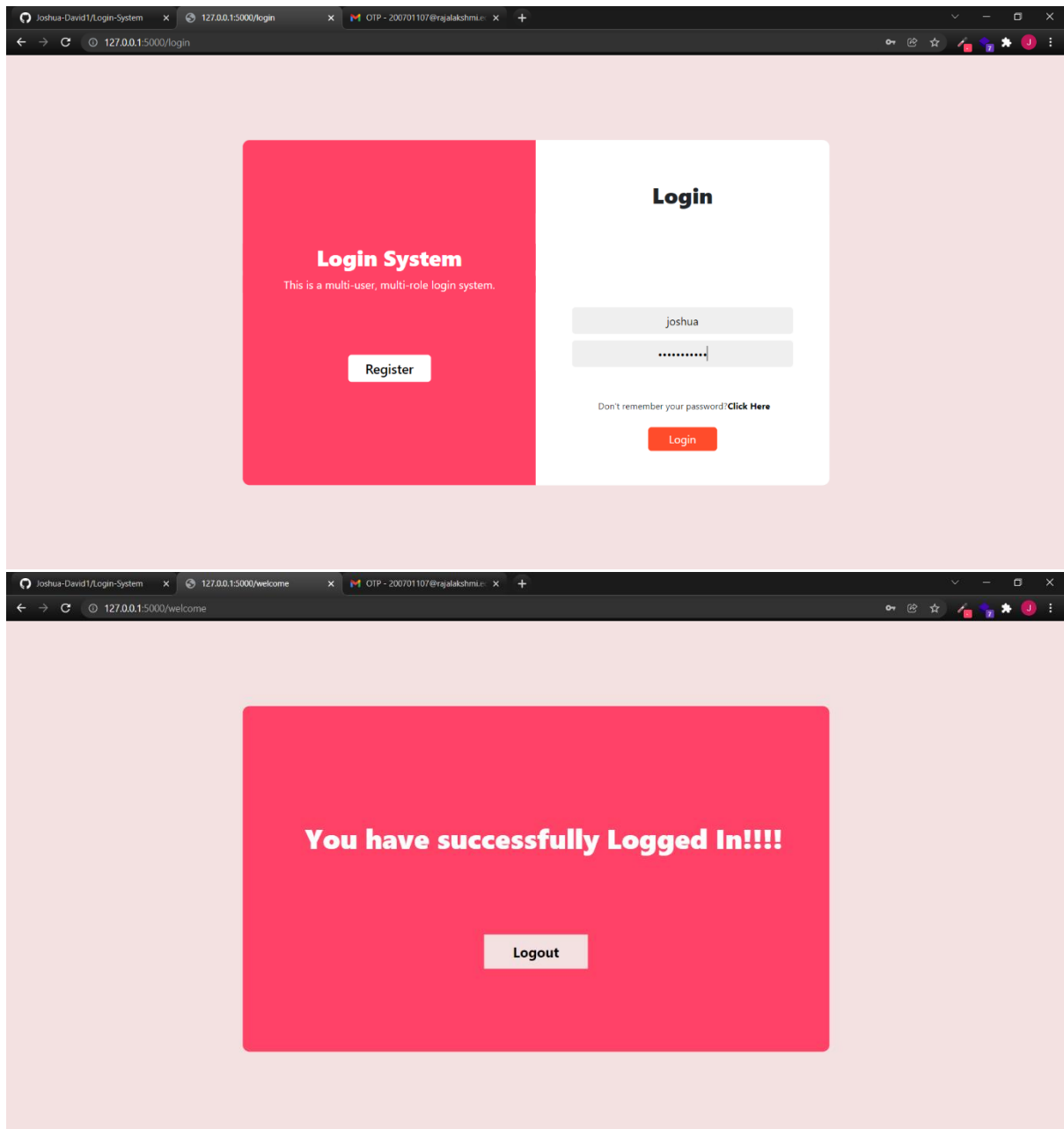
After clicking the submit button, our password would have successfully been changed and we could easily login to our previous account with the new password which we currently set.
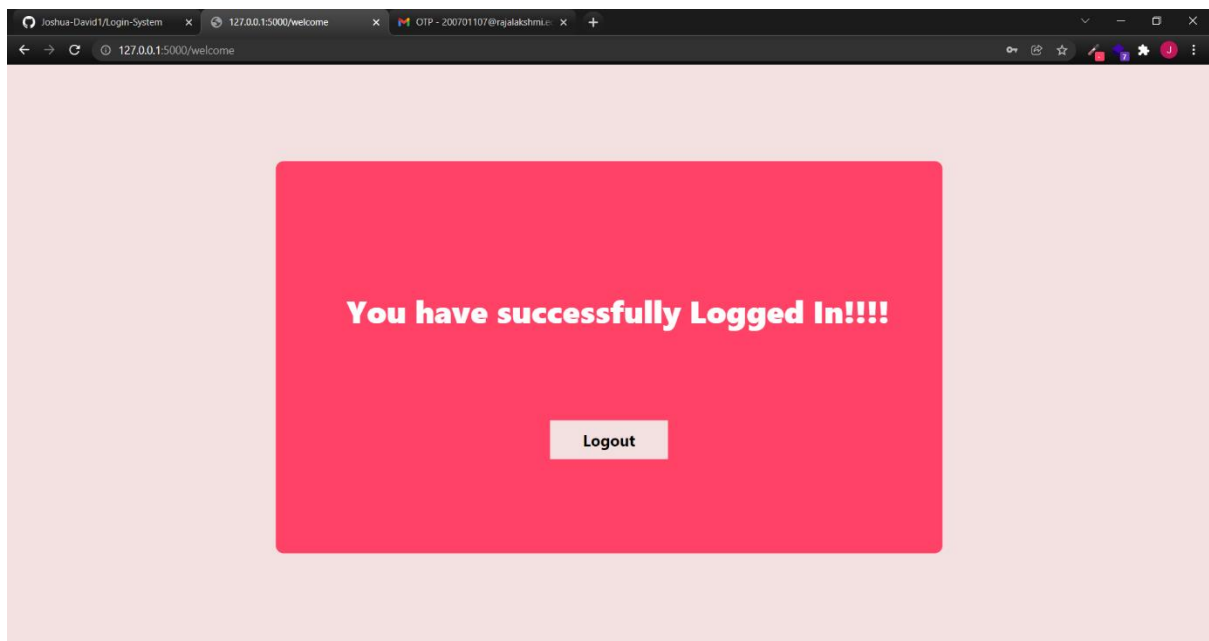
Now we can logout and login with the new password and it would work.

We've also set session time for a user. After 10 hours, new cookies would be generated.

Technologies Used:

➔ **Flask frame-word for backend development.**
➔ **Flask WTFORMS for input forms since it provides more security and protection from csrf attacks.**
➔ **Flask Login for login functionality.**

➔ **Smtplib for sending emails for OTP's.**
➔ **We used SQL as our database and we used flask SQLAlchemy as a middle-man to connect our python application to SQL database.**

Thank You!!