



TRIBHUVAN UNIVERSITY  
INSTITUTE OF ENGINEERING  
PULCHOWK CAMPUS

**RECOMMENDATION LETTER GENERATOR**

**Team Members:**

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A REPORT OF PROJECT FOR SOFTWARE ENGINEERING  
SUBMITTED TO THE DEPARTMENT OF ELECTRONICS AND  
COMPUTER ENGINEERING

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# **Recommendation Letter Generator**

## **Introduction**

The Recommendation Letter Generator system is designed to integrate the overall process of requesting and creating recommendation letters for students. After the completion of their final year, there is a significant number of students applying to foreign Universities for higher education, and professors are faced with a massive influx of recommendation letter requests. This causes significant delay in accommodating the student requests, so our recommendation letter generator system tries to solve this problem by creating a common portal for both students and professors, whereby students can request a professor by providing the appropriate credentials and resume. Then for professors, our portal provides an organized list of all pending student requests, and then the professors can easily create recommendation letters for the students.

## **Technologies Used**

We have employed the following technologies to power our Recommendation Letter Generation System

1. Django to handle the backed system
2. HTML/CSS crate UI and frontend
3. Relational Database SQLite

# System Architecture

Our system can be mainly categorized into the following components

1. Backend System

This is the system powered by Django, a powerful framework for the Python programming language. It implements an MVT (Model-View-Template) architecture and is responsible for activities such as database management, user authentication, session management, and other processing logic.

2. Frontend System

This is the system that is rendered to the end user and provides an easy-to-understand way of interacting with our system. It is rendered as a webpage in a browser and employs web technologies such as HTML and CSS.

In our system, there are mainly three types of roles that a user will have

1. **Admin**

Administrators are those who are responsible for the maintenance of the system, they have privileges of managing the other user's accounts and handling their data. They are capable of adding teachers and modifying the student's information

2. **Teacher**

Teachers are the ones who provide the recommendation letters in response to requests from students. Our portal provides the teachers with an organized list of all student requests along with accompanying pieces of information such as their CV, extra-curricular-activities, scholastic achievements, and any other such relevant information, the teachers can then choose from a list of options in our intuitive form and create custom recommendation letters for students.

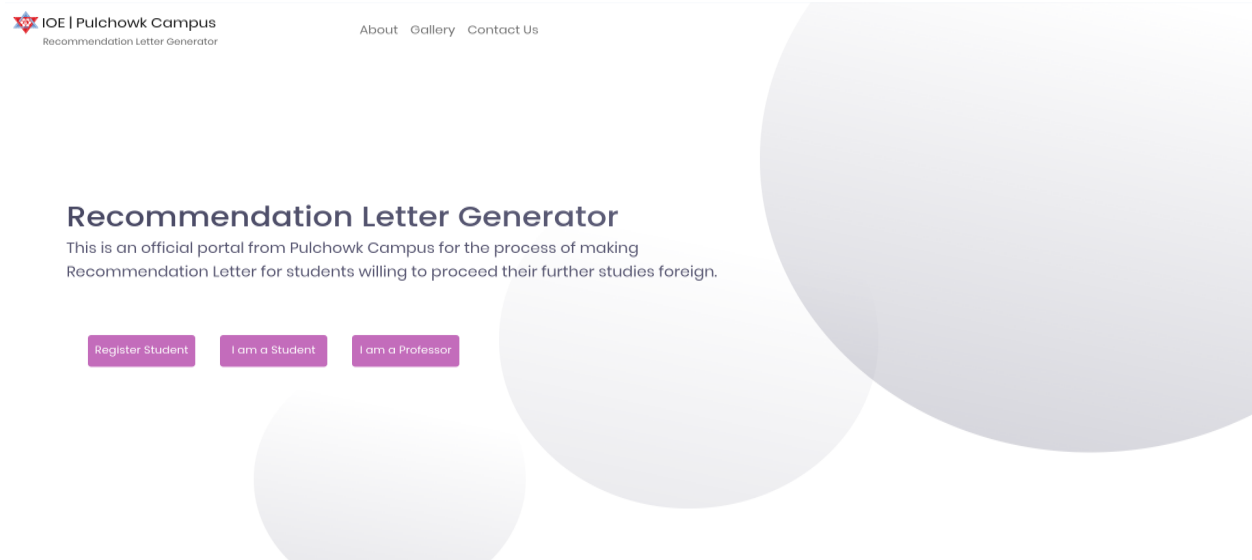
3. **Student**

Students are the ones making requests to teachers for recommendation letters, upon registering into our portal and creating an account, the students provide all the relevant information such as their faculty, department, professors they have studied from, and the names of projects or any other extra activities they have been involved with during their time in college. Then, they can request one of the teachers for a recommendation letter.

A walkthrough of the Recommendation Letter Generator System:

## 1. Landing Page

This is the first page that users are greeted with when they go to our portal



## 2. Admin Panel

The admin panel is given access to only a few individuals. It is done manually by assigning Django superuser to the user to be given admin access. The admin can then assign other users as admin from this interface too. Students and professors can be registered from here.

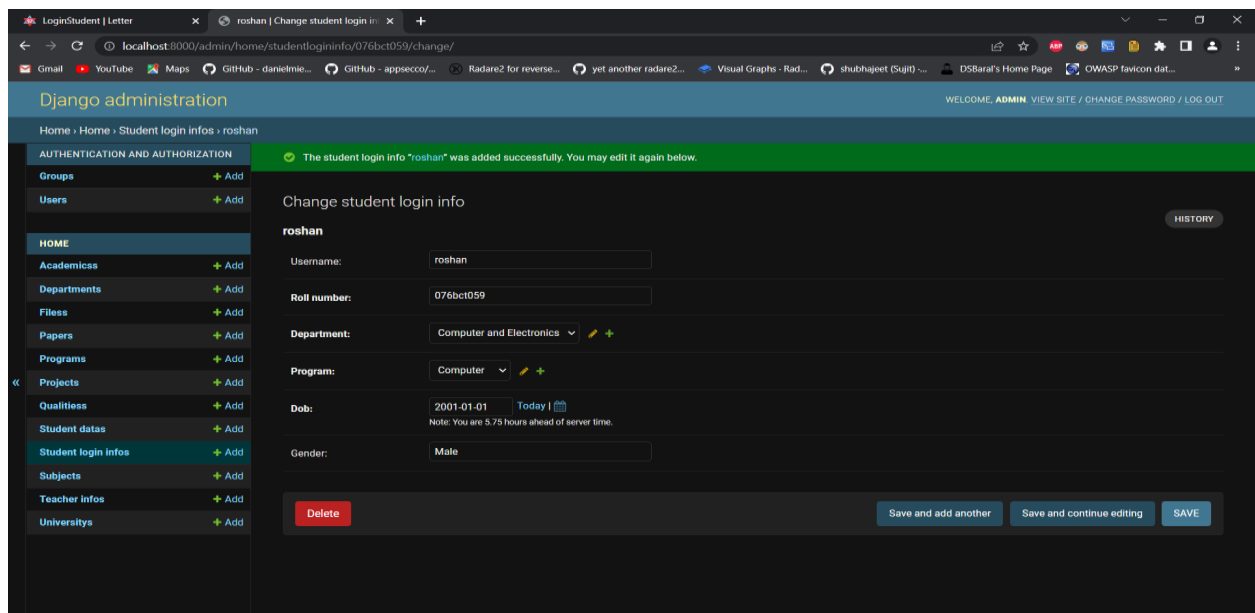
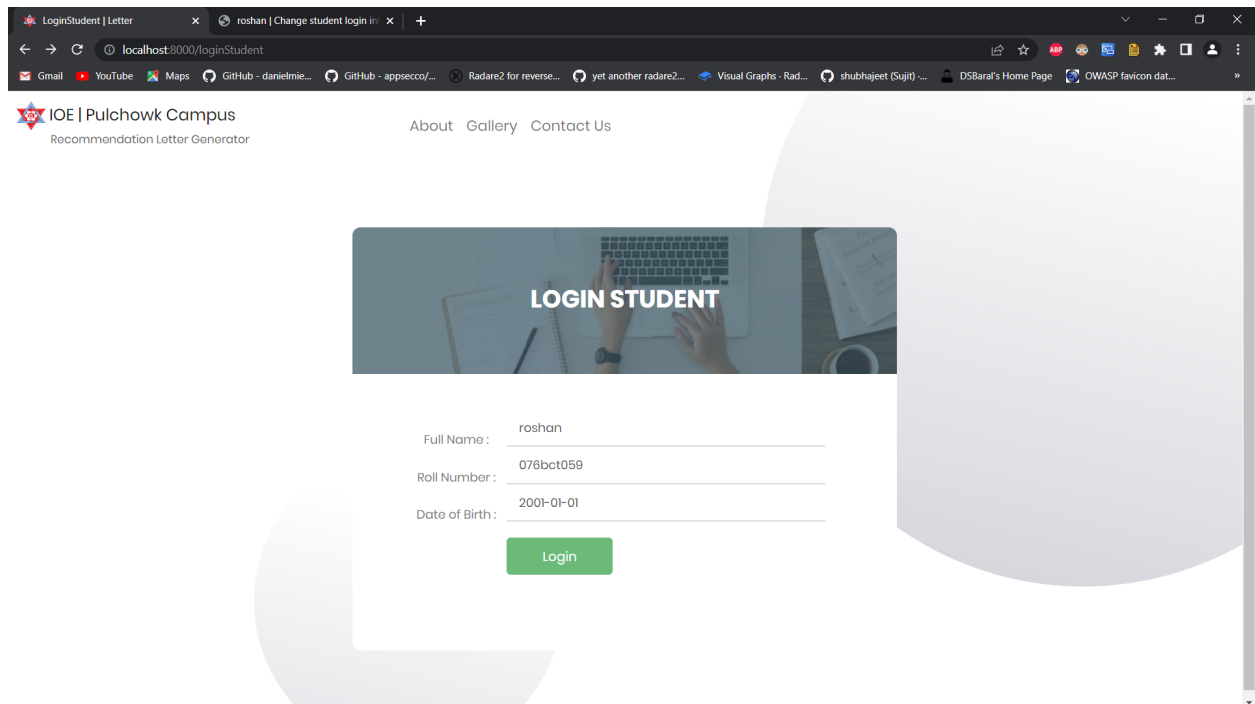


Figure 1: Admin Panel

The above picture shows the student login info tab where a student can be registered from the admin interface.

### 3. Student Login

The figure below shows the student login interface. A student already registered can log in using this interface. He/She has to just type in his/her name, roll no. and date-of-birth and that's all, he is through.



The screenshot shows a web browser window with the URL `localhost:8000/loginStudent`. The page header includes the logo for IOE | Pulchowk Campus and the text "Recommendation Letter Generator". Navigation links for "About", "Gallery", and "Contact Us" are present. The main content area features a "LOGIN STUDENT" heading over a background image of a person's hands typing on a laptop. Below this, there are three input fields: "Full Name :" with the value "roshan", "Roll Number :" with the value "076bct059", and "Date of Birth :" with the value "2001-01-01". A green "Login" button is positioned below the input fields.

Figure 2: Student Login

After the student logs in, he/she is presented with the following interface. He/she should fill in their details.

Request | Letter

roshan | Change student login in: x

localhost:8000/loginStudent

Gmail YouTube Maps GitHub - danielmie... GitHub - appsecco/... Radare2 for reverse... yet another radare2... Visual Graphs - Rad... shubhajeet (Sujit) ... DSBaral's Home Page OWASP favicon dat...

IOE | Pulchowk Campus  
Recommendation Letter Generator

About Gallery Contact Us

### Hey roshan!

Email  
ros@gmail.com

Requesting Professor  
Aman Sakya | AS

Years professor has known you for:  
1 year

Subjects  
Select Subject

☐ TOC  
☒ DBMS

Final Year Project:  
some

He/she supervised Final Project?  
Yes

Other Project Name(if supervised):

Paper Published  
No

Link for paper (if published):

Paper Title (if published):

Other  
☐ Deployed a Project  
☒ Done Internship

Next

Figure 3: Student Login 2

The student is asked to fill in additional information.

Request | Letter

roshan | Change student login in: x

localhost:8000/studentform1

Gmail YouTube Maps GitHub - danielmie... GitHub - appsecco/... Radare2 for reverse... yet another radare2... Visual Graphs - Rad... shubhajeet (Sujit) ... DSBaral's Home Page OWASP favicon dat...

IOE | Pulchowk Campus  
Recommendation Letter Generator

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### Additional Info

Requesting University  
University Name

Program Applied  
Program Applied

Deadline  
mm/dd/yyyy

GPA:

Tentative Ranking

Transcript  
Choose File | No file chosen

Recent CV  
Choose File | No file chosen

Photo  
Choose File | No file chosen

Extracurricular Activities

Submit

Figure 4: Student Login 3

The information is sent to the requested teacher.

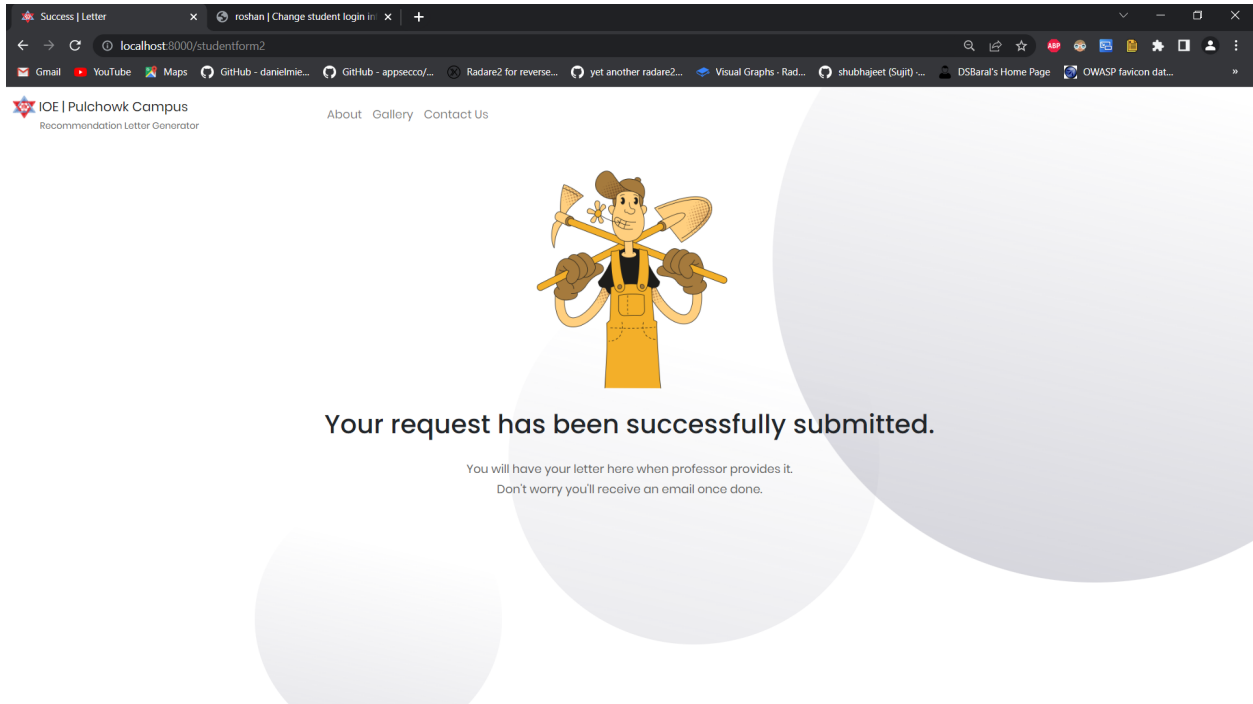


Figure 5: Student Login 4

#### 4. Professor Login

The figure below shows the professor login interface. A professor already registered can log in using this interface. He/She has to just type in his/her name and password and that's all, he is through.

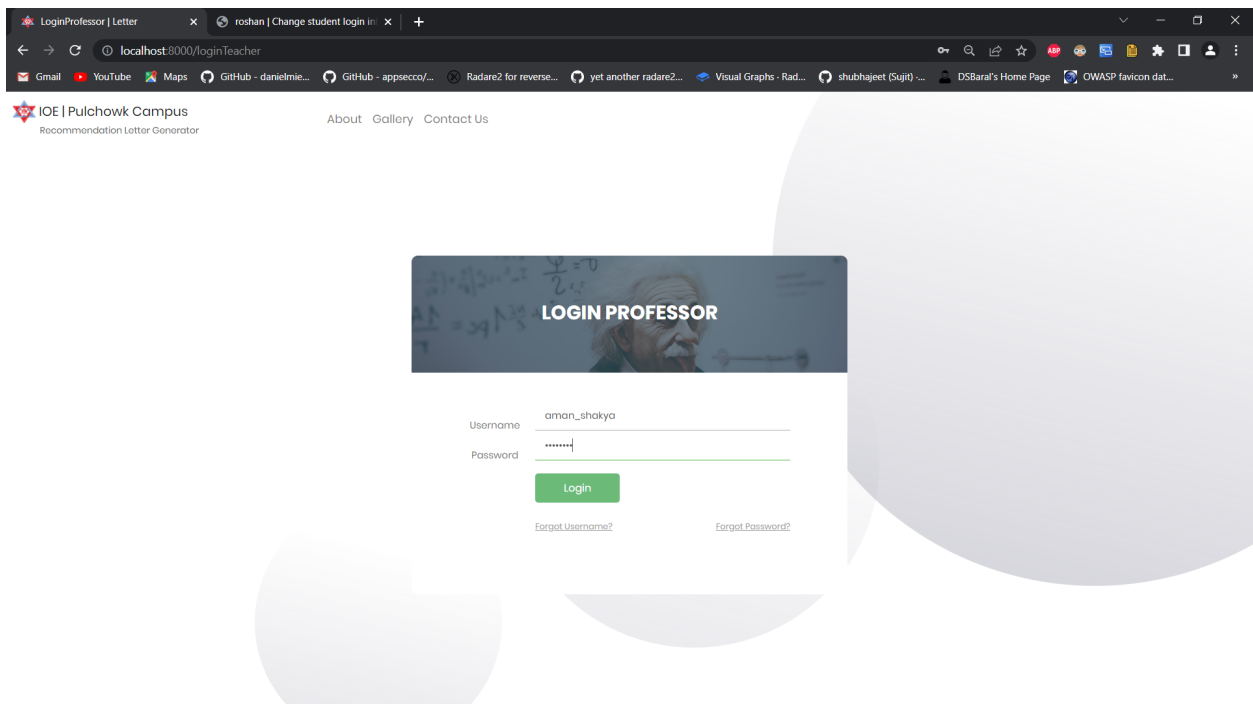


Figure 6: Professor Login

After the professor logs in, he/she is asked to create a recommendation letter for students' requests.

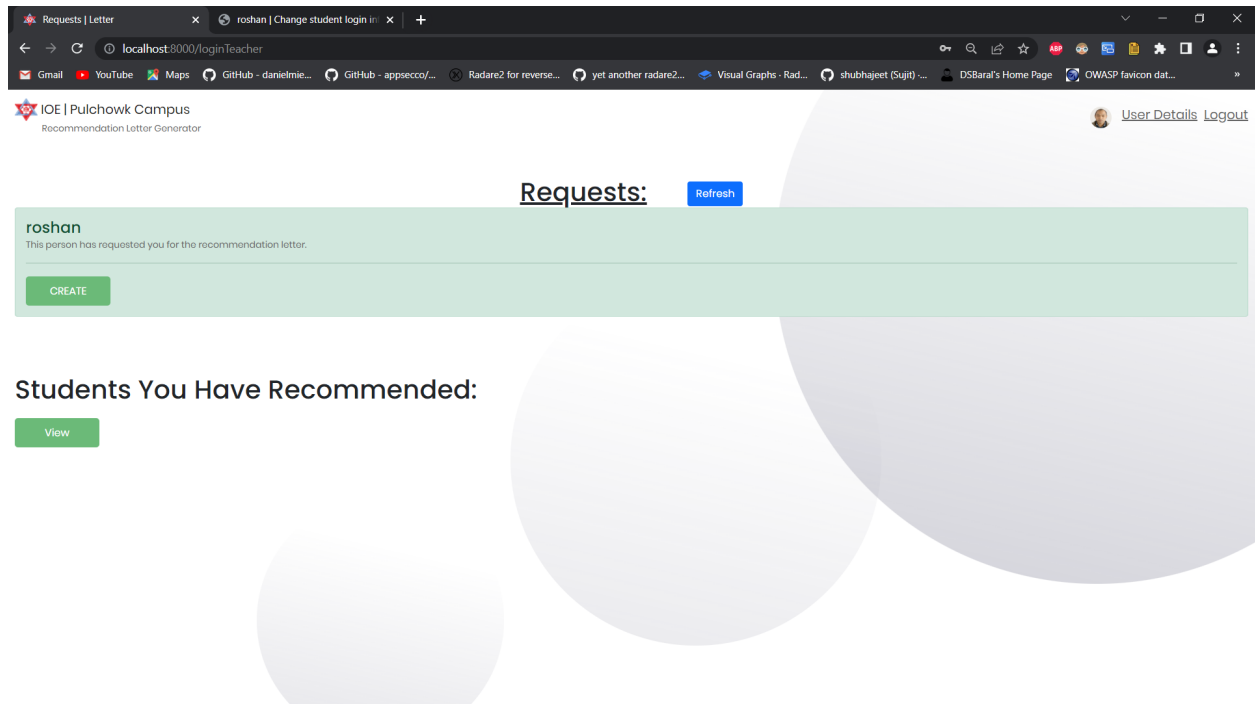


Figure 7: Professor Login 2

If the professor chooses to generate the recommendation letter, he/she is presented with the following interface.

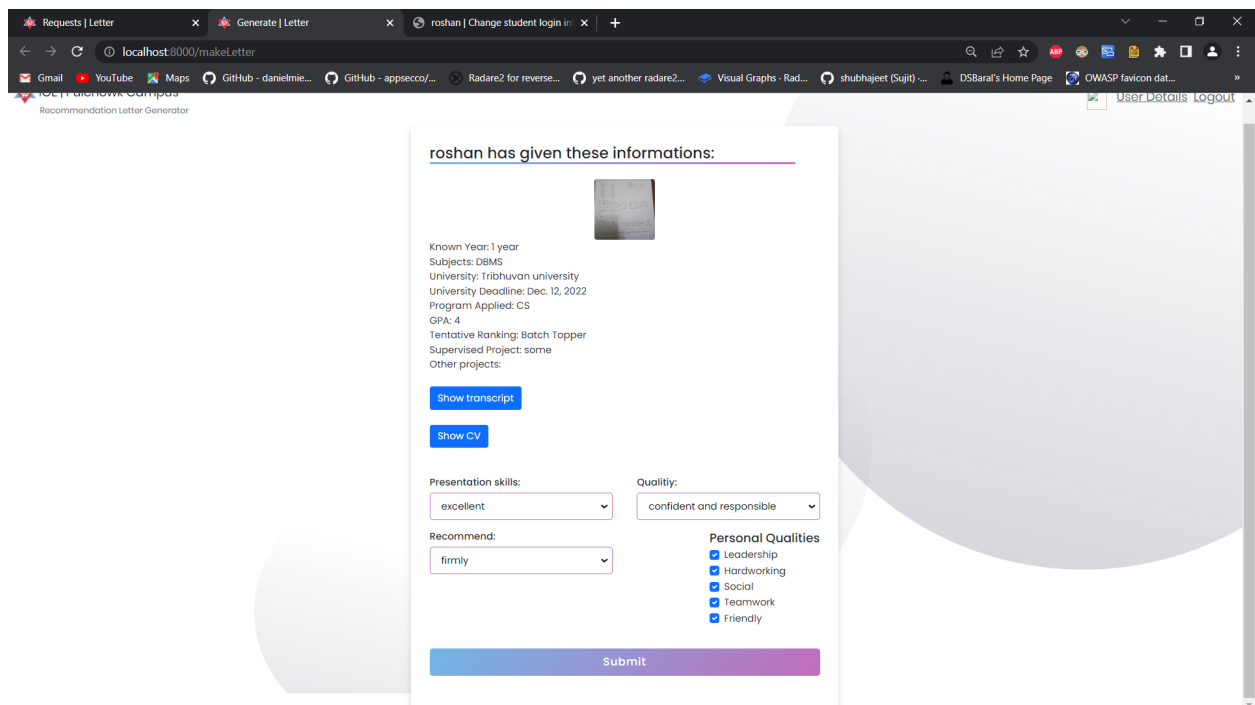


Figure 8: Professor Login 3



The following letter is presented to the professor after submitting the previous form. The professor can make amends in the letter if he/she wishes to.

**Letter of Recommendation**

I would like to firmly recommend **roshan** for admission to the graduate program at your university. I have known **roshan** for about 1 year now as an undergraduate student in Computer Engineering. Moreover, I was the supervisor for his final year project. I taught him DBMS.

I recall **roshan** as a confident and responsible student. In fact, he was the topper of his batch in Computer Engineering. As an instructor and his supervisor too I had enough opportunity to observe his capabilities closely.

I was the supervisor in his project titled same. I was quite impressed by his hardworking nature and learning capability.

I have noted his excellent presentation skills while he presented his work at our department as well as in the conference. I have seen that he has good leadership capability and has a teamwork spirit. He is a very hardworking student who is always eager to learn. He is a well-spoken person with a friendly and gentle personality. He also has given his time to different social causes. He is very helpful and cooperative student. He eagerly handed over his project work to his juniors who wanted to further continue the research on the topic along with proper guidance and resources. I have also been impressed by his communication skills during project presentations and lectures.

I appreciate his technical and professional skills. Besides academics, he was also involved in several extra-curricular activities. He participated in various competitions organized in and off the campus. He has worked in some IT companies which, I believe, has further added to his technical skills and professional experience.

I am quite confident that **roshan's** skills coupled with academic capability will make him a good candidate for your university. Thus, I would highly recommend him for the graduate program at your esteemed university. Please feel free to contact me if further enquiry is required.

Aman Sakya,  
Assistant Professor,  
Department of Computer and Electronics Engineering  
Pulchowk Campus, Institute of Engineering, Tribhuvan University  
Phone: 987654320  
Mail: amansakya@gmail.com

**submit**

Figure 9: Professor Login 4

**Letter of Recommendation**

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Aman Sakya,  
Assistant Professor,  
Department of Computer and Electronics Engineering  
Pulchowk Campus, Institute of Engineering, Tribhuvan University  
Phone: 987654320  
Mail: amansakya@gmail.com

**submit**

Figure 10: Professor Login 5

A mail is sent to the student to notify them that the letter has been generated for him/her. The student then can check the letter in the student portal.

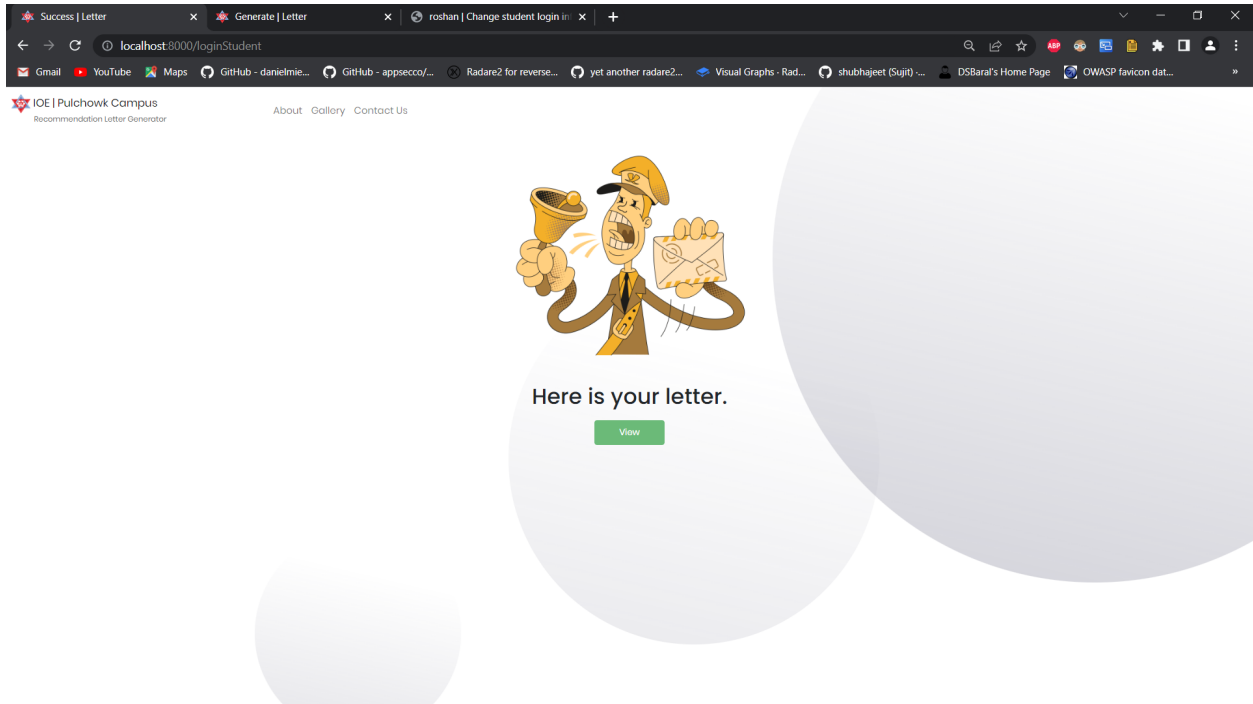


Figure 11: Professor Login 6

## 5. Generated Letter

The figure below shows the generated letter.



Figure 12: Generated Letter