

SUST PROGRAMMING COMMUNITY

CSE-250 PROJECT

Group: 15

Team members:

- ❑ Md. Tanhab Hossain (2018331051)
- ❑ Ananna Datta Dristy (2018331049)

Motivation Behind Our Project

As we know, the newcomers always feel at a loss after coming into the CSE department regarding programming. They usually do not know how to start coding and what to do concerning that. So they need help from someone who has walked through the same path. But some students hesitate to ask for help or don't know whom to ask or where to go. Moreover, the students from other departments go through the same issue as they have non-major courses of CSE.

SUST Programming Community will be able to help them in these regards. Our target is not just for the newcomers only but for every student. Every student needs help at some point. And each one of us is expertise at different kinds of stuff. We never know from whom we can get a little advice that can make a big difference in our knowledge.

BACKEND

Django

Version: 3.2.9

Link: <https://www.djangoproject.com/>

Reasons to choose:

- ❑ Both of us were already familiar with the Python language deeply. So we planned to use a framework related to this language which brought us to Django.
- ❑ Django offers a very strong and easy structure to develop and connect different parts of a website.
- ❑ Django template's structure is very Object-Oriented which is quite familiar to both of us.

FRONTEND

HTML-CSS

Version: 5

BOOTSTRAP

Version: 4

Link: <https://getbootstrap.com/>

Reasons to choose:

- ❑ We wanted a simple UI frontend that is not heavily library dependent or version dependent. Bootstrap is very simple and it's completely based on HTML and CSS. So it was our first choice.
- ❑ We wanted to avoid totally javascript-based frameworks (like next.js etc.) as we planned not to focus on JS web development in this project. So bootstrap was one of the best options.

DATABASE

PostgreSQL

Version: 14.1

Link: <https://www.postgresql.org/>

Reasons to choose:

- ❑ We wanted a SQL database that offers good speed and security in querying and storing. Django comes with a pre-built mySQLite database. But we wanted to avoid it due to its limitation in multiuser query handling.

Welcome to our index page

WELCOME TO OUR PROGRAMMERS COMMUNITY

The most supportive community of programmers and beginners learning to code. Have questions, a big idea, something to share or need help? Our community will be there for you in every steps.

[Join Us Now](#)



Our Community

Join every students and teachers in one community



Cooperation

Cooperate you to overcome every problems you face in programming



Skill Development

Develop your skills more and more by workshops and resources

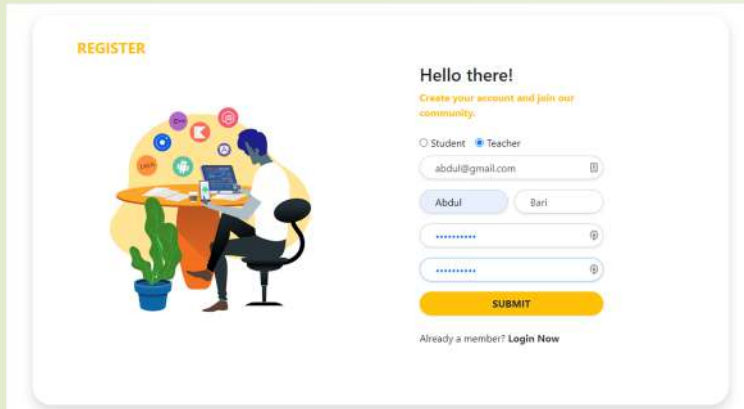


Support

Support others without any hesitations in the path of programming

Feature: Registering User

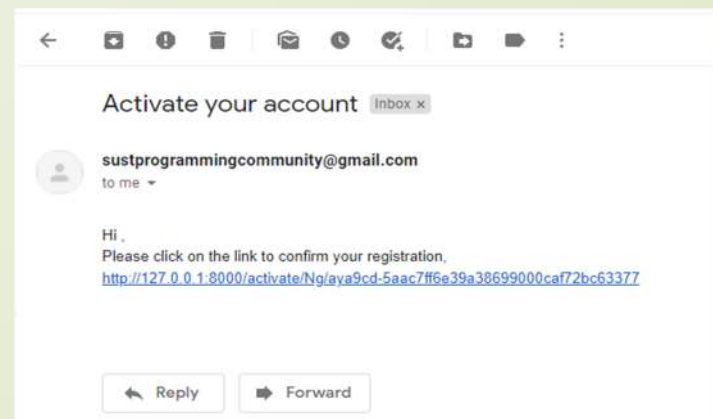
We implemented an email-verified registration system to improve security. Registering a user takes place in two steps -



The registration form is titled "REGISTER" in orange. It features an illustration of a person sitting at a desk with a laptop, surrounded by colorful icons representing various digital concepts. The form includes a greeting "Hello there!" and a sub-header "Create your account and join our community." Below this, there are radio buttons for "Student" and "Teacher", with "Teacher" selected. The email field contains "abdul@gmail.com". The first name field contains "Abdul" and the last name field contains "Bari". There are two password fields, both masked with dots. A yellow "SUBMIT" button is at the bottom. A link "Already a member? Login Now" is at the bottom right.

1. The user provides a valid email, first name, and last name. Also, he has to provide a strong minimum 8 letter password.

2. A verification email is sent to the user. By clicking the registration link the user will be verified and prompted to log in.





Feature: Role

Though out our community we have implemented a role system where all users are divided into two roles: Teacher and Student. All users will get to select the role only while registering.

Teacher	Student
The mentors of young mind	The learners as well as visitors
Teachers can delete or modify all the public posts made by other students after being verified.	Students can post, edit, delete only their own posts
Teachers have different profile attributes like designation.	Students have different profile attributes like Registration number.
Teachers have a unique badge after their name.	Students don't have any particular badge

Welcome to our homepage. Here you will find all the posts of our community. You can contribute by sharing your insights in different comments.

SUSTPC

HomeResourcesNotification2Gennady

Search Posts

Search


Create a post
Write what you want to know and share what you know to the community!
[Create Now](#)

Upcoming Contests

Hello 2022

Codeforces Round #764 (Div. 3)

[Contests Details](#)

**Abdul Bari** Teacher
0 minutes
Prims algorithm for Minimum Spanning Tree

```
int n;
vector<vector<int>> adj; // adjacency matrix of graph
const int INF = 1000000000; // weight INF means there is no edge

struct Edge {
    int w = INF, to = -1;
};

void prim() {
    int total_weight = 0;
    vector<bool> selected(n, false);
    vector<Edge> min_e(n);
    min_e[0].w = 0;

    for (int i=0; i<n; ++i) {
        int v = -1;
        for (int j = 0; j < n; ++j) {
            if (!selected[j] && (v == -1 || min_e[j].w < min_e[v].w))
                v = j;
        }

        if (min_e[v].w == INF) {
            cout << "No MST!" << endl;
            exit(0);
        }
    }
}
```

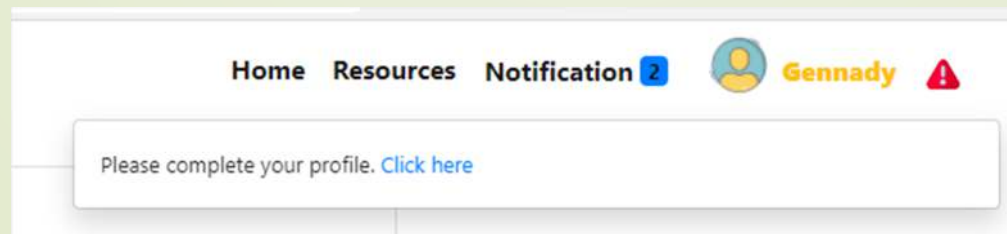
Feature: Profile Completion alert

Just creating a user account is never enough. SustPC is a community where you may make friends, mentors and expand your network. That's why we encourage the new users to complete their profile

That's why new users without complete profiles will get this alert icon.



Clicking the icon will prompt the user to complete his/her profile



Feature: Profile Edit

All users have these common attributes:


- First Name
- Last Name
- Profile picture
- Mobile number
- Department

Some Attributes are Role dependent:


Teacher	Student
Designation	Registration No, Batch


N.B: Mobile number and profile picture is optional field i.e. These are not required to complete profile.


Feature: Profile Edit



Gennady Korotkevich
18 , CSE

 **1@gmail.com**
Email Address

 **1886328462**
Mobile Number

 **2018331051**
Registration No

Edit [Posts](#)

First Name

Gennady

Last Name

Korotkevich

Email

1@gmail.com

Department/Batch

CSE

18

Registration No

2018331051

Mobile No

1886328462

Change profile picture

Choose File

No file chosen

Password

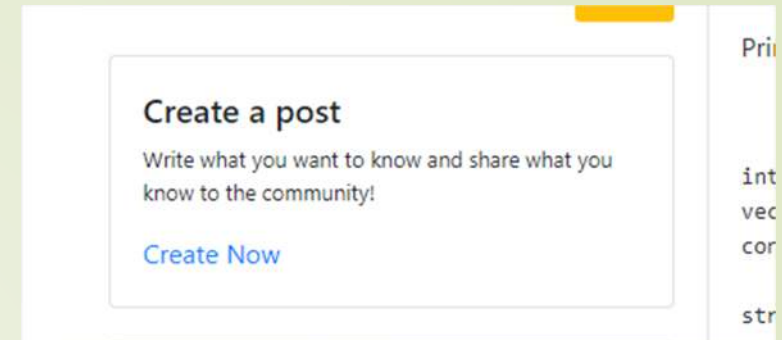
Confirm password

Cancel

Save Changes

Feature: Create a Post

Users can navigate to create post page by clicking this button in home page



As this is not a simple post i.e. it may contain code fragments, pictures, tables, etc. , we used a Django library for this.

Django-ckeditor-5

Version - 0.0.14

Link : <https://pypi.org/project/django-ckeditor-5>

Express your codes and queries freely using our enriched text editor

Create a post

Share with us any problem you face, any knowledge you want to spread out in the community or inform us about workshops and contests


Text:


Paragraph

B

I


U






x_2


x^2



\therefore

$\frac{1}{2}$







AI

A^E

Δ






Hi, I have just started learning c. I don't know what's wrong with this code. Could somebody please help?

```
#include <stdio.h>
int main()
{
    printf("hello world")
}
```


C++



Post 


This is how it looks on our homepage


[Home](#) [Resource](#)

**Gennady Korotkevich** 0 minutes

Hi, I have just started learning c. I don't know what's wrong with this code. Could somebody please help?

```
#include <stdio.h>
int main()
{
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}
```

 0 Comments



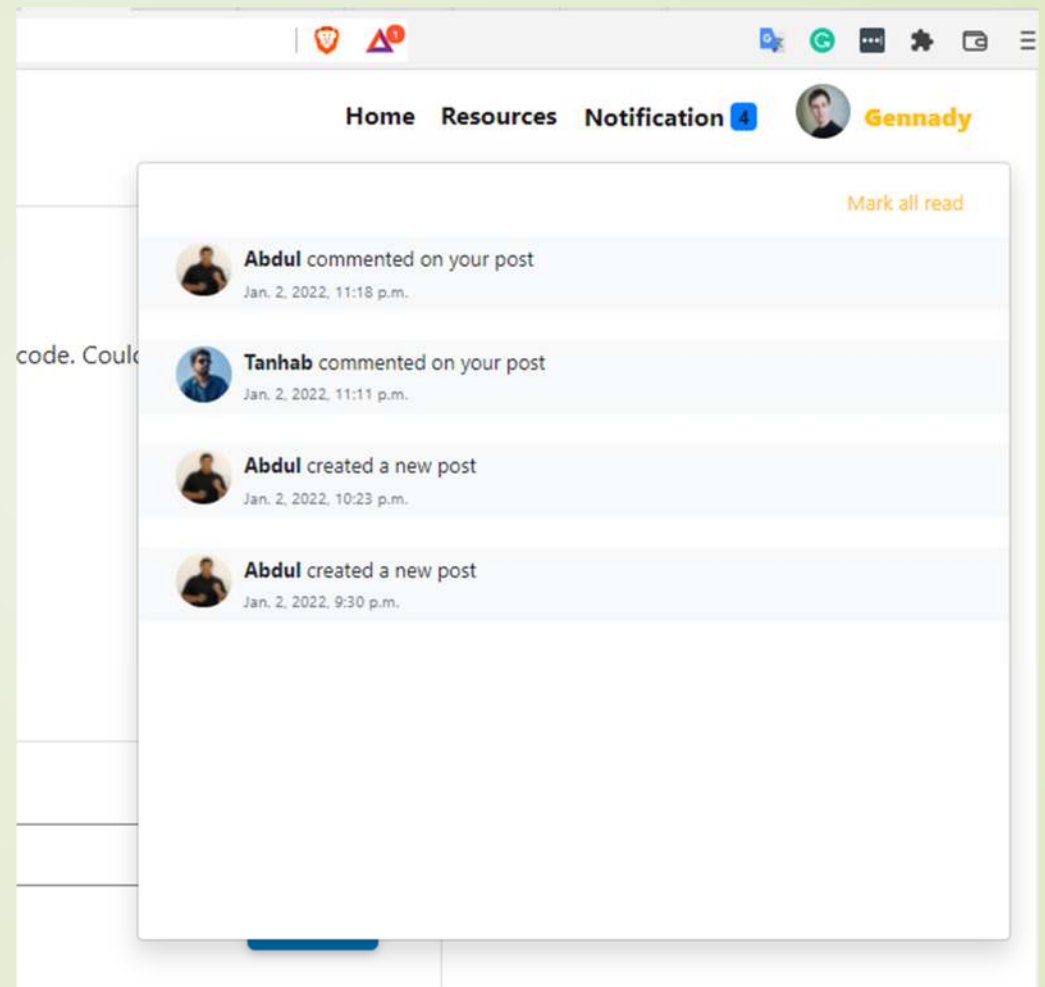
[Post comment](#)

Recent comments

Feature: Notification

Always be on the lookout for our real-time notifications. A user will get a notification for each post notification and comments on his posts.

Clicking on a notification will take you to its post or comments.




Feature: Comments

User replies are the backbone of our SUST Programming Community.

Give feedback or voice your opinion in the comment box to support our community.

[Home](#) [Resources](#)

**Gennady Korotkevich** 16 minutes


Hi, I have just started learning c. I don't know what's wrong with this code. Could somebody please help?

```
#include <stdio.h>
int main()
{
    printf("hello world")
}
```


2 Comments

[Post comment](#)

Recent comments

 **Tanhab Hossain** 10 minutes

you missed a ; after printf("hello world") . Hope that helps.

 **Abdul Bari** 4 minutes


You missed a semicolon after printf statement. If you want to learn more, please watch my videos <https://www.youtube.com/channel/UCZCFT11CWB3MHNIGf019nw>

Feature: Comments with image

You can also add images in your comments to make them more meaningful.


3 Comments

Comment here




Post comment


Recent comments

 Tanhab Hossain14 minutes


you missed a ; after printf("hello world") . Hope that helps.

 Abdul Bari7 minutes

You missed a semicolon after printf statement. If you want to learn more, please watch my videos
<https://www.youtube.com/channel/UCZCFT11CWBi3MHNIGf019nw>

 Gennady Korotkevich0 minutes

Thank you



Feature: Resource

Find useful resources like famous books, articles, previous year questions, notes made by mentors on the Resource page.

You can also contribute by uploading resources that are useful to the community.

Resources Gallery

The more we share the more we have! The ultimate storehouse of knowledge.

Want to share?

No file chosen



Resource List



Database by
Ketab Uddin

Jan. 2, 2022, 11:36 p.m.

Uploaded by Gennady Korotkevich



DS by Shahjahan
Tapan

Jan. 2, 2022, 11:34 p.m.

Uploaded by Gennady Korotkevich

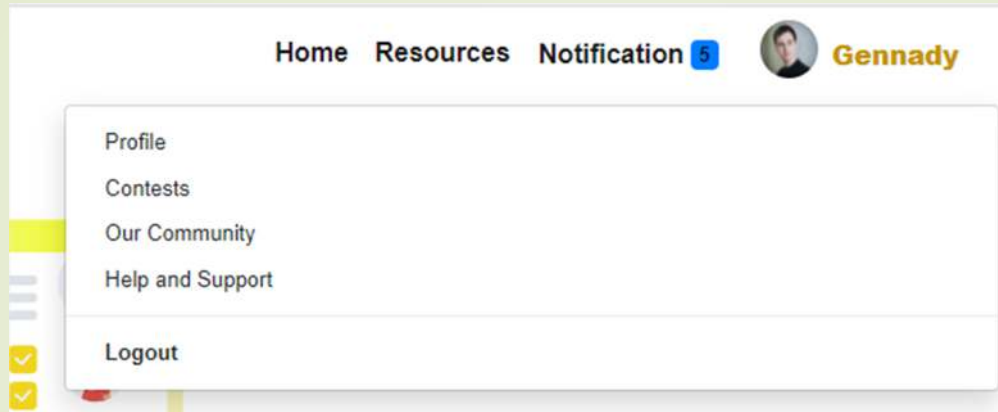


Algorithm by
Giasuddin

Jan. 2, 2022, 11:34 p.m.

Uploaded by Gennady Korotkevich

Feature: Menu



Clicking on your name on the right side of Navbar will open up the menu section. Which contains the link to four different pages:

- ☐ Profile page
- ☐ Contests page
- ☐ Our Community page
- ☐ Help and Support page

Feature: Contests

This page keeps track of different online contest platforms and shows the schedule together on this page.
Currently, we have implemented for Codeforces and Atcoder sites.

Upcoming Contests

#	Name of the Contest	Contest Duration	Before The Contest	Contest Link
1	Hello 2022	2.25 hours	14 hours, 51 minutes	Click here
2	Codeforces Round #764 (Div. 3)	2.25 hours	1 week	Click here

Feature: Our Community Page

We can not call ourselves a community without knowing each other. On this page, we can learn basic information about other students and teachers of this platform.

[Home](#) [Teacher's List](#) [Student's List](#) [About](#)

TEACHER'S OF THE COMMUNITY

Name	Department	Designation	Email Address	Mobile No.
Abdul Bari	CSE	Associate Professor	astroboy3006@gmail.com	55089764

[Home](#) [Teacher's List](#) [Student's List](#) [About](#)

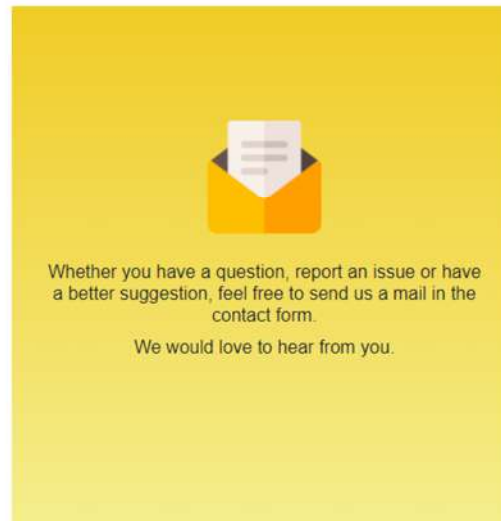
STUDENT'S OF THE COMMUNITY

Name	Department	Batch	Registration No.	Email Address	Mobile No.
Gennady Korotkevich	CSE	18	2018331051	1@gmail.com	1886328462
Tanhab Hossain	None	None	None	tanhab3006@gmail.com	None

Feature: Help and Support Page

As a developer, we are quite inexperienced. So, the feedback from our community will drive us to do better.

Here, users can send their feedback and report issues and it will definitely reach us.



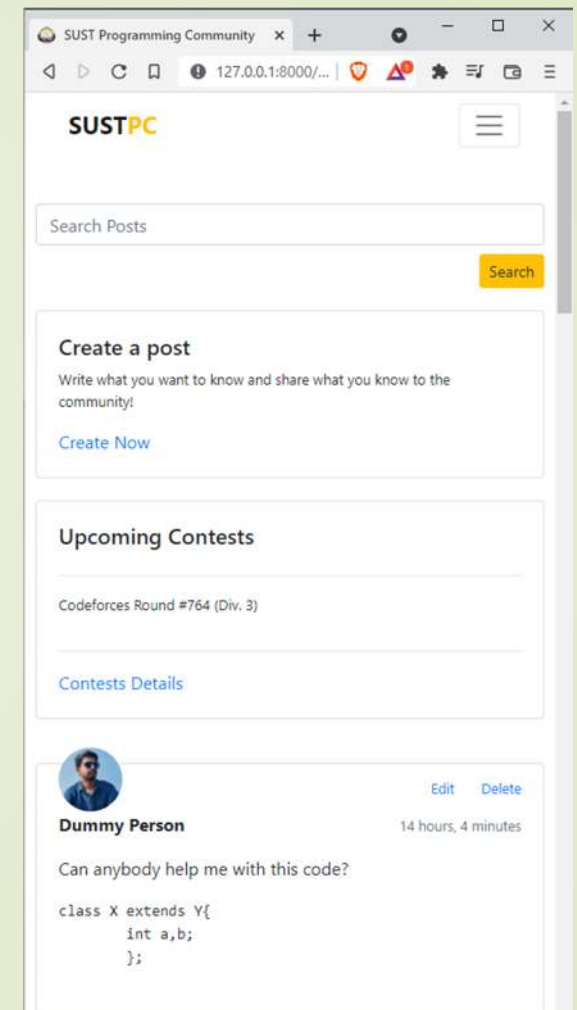
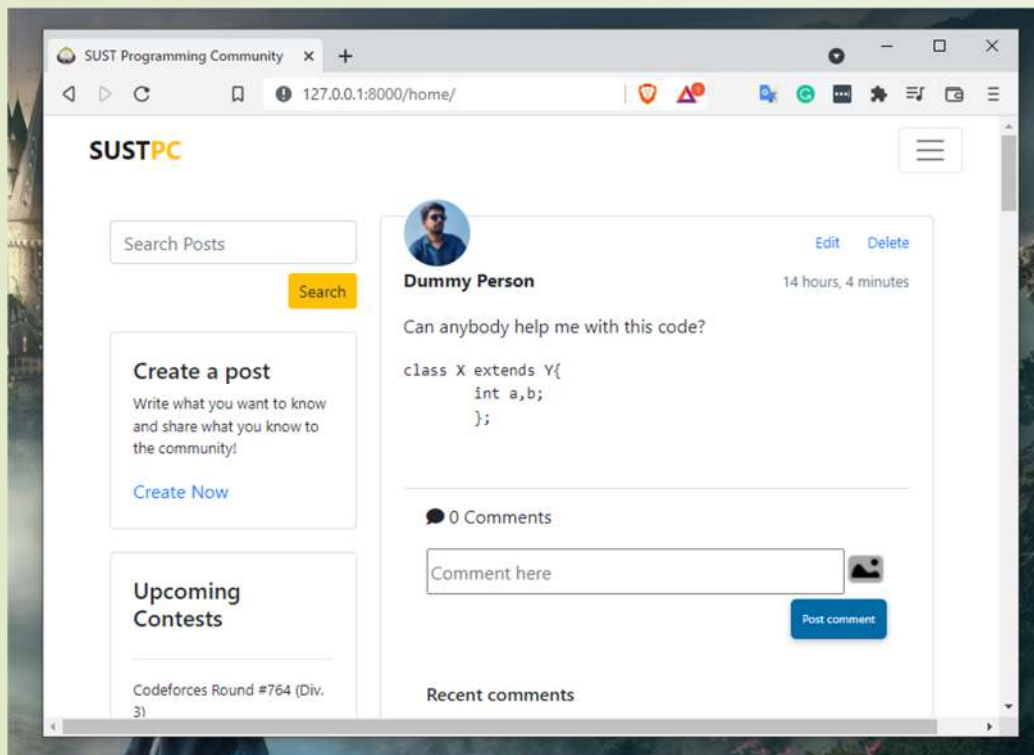
Leave us a message!

Subject

Message

Send

Last but not the least, all of our pages are 100% responsive be it a half-size screen, tablet, or mobile. Users will always get the best experience.



Unimplemented Features

Even though we tried our best, some of the features are yet to be implemented.

- ❑ We wanted to make an online compiler like the GeeksforGeeks website where users can instantly run the code and test it in the posts and comments. But the implementation of an online compiler is currently out of our expertise. We tried to use 3rd party app but they were not much help.
- ❑ We wanted to make a tag system where the user can mention others by using '@' and the other person will be notified. But we faced some difficulties implementing this feature.

ANY
Questions?

Thank you