



Project Proposal: SDS Labs Winter Of Code 2024

Local Volunteer Connector: VolunConnect

Personal Information:

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Coding Skills:

- Fluent in HTML and CSS with sound knowledge of
- Good command over mongo DB
- Sound knowledge of FLASK
- Superficial knowledge of web development
- Learning Javascript

Development Environment:

- microsoft windows
- VS code

Project: Local Volunteer Connector

1. Introduction

The aim of this project is to connect volunteers to campus events , club events and local NGOs or community initiatives of IIT Roorkee. This project aspires to bring efficiency in the fast paced life of IITR Junta and boost the business alongside. I plan to make a website that gives the students an option to bridge this gap by providing a seamless platform for volunteers and organizations to connect and where individuals can discover volunteer opportunities tailored to their skills, interests, and

locations, while organizations can effectively manage their events and recruit volunteers and a promise to volunteers of chapoo by organising events.

2. Use Cases

Primary Goal

The Primary goal of this project would be to set up a web framework and database system. The first step would be to create a login and sign up portal. Once this is established, the sequential list of event steps that I plan to integrate in my website are:

For Volunteer:

1. The volunteer needs to sign up on the website with the details such as Full Name , Mobile no. ,Email ID, Branch, Enrolment ID and year of Volunteer in college etc. The student ID also needs to be verified by the admin but we'll assume it to be authentic for the time being.
2. Once the account is set up, the student upon logging in would be presented with a list of his volunteer events (pending), if any, and previous events (if any).
3. The student can choose from the list of events open to work at the given time and proceed to apply on particular events.
4. Once the student applies to volunteer in events he can wait for confirmation by event admin by email or website .
5. If confirmed, the student will then receive the unique ID which will be used at the time of volunteering in the event .

For Organiser of Event:

1. The Clubs and NGOs initially need to sign up on the website with the details of the clubs and NGOs.
2. The Clubs and NGOs would then update the upcoming events
3. Once the account is set up, it needs to be authenticated by the admin. Once the account is verified, the canteen could start posting events on the website.
4. The clubs and NGOs need to update the status of the event and How many volunteer he need and update the deadline to apply , accordingly.
5. When a student applies to a particular event, the organizer of Event needs to confirm it by Email and on the website.

Secondary Goals

The other options I would like to include in my website after successful completion of primary goals are:

1. To introduce the option of subscription for special features.
2. To integrate a payment portal for students as a Tip.
3. To add a feedback portal for the students .
4. To add a student wallet on the website, for faster payment.

3. Skills Required

- HTML: To handle the front end of the website. To be used to describe the structure of web pages involved.

- CSS: Another important part of the front end. To handle the presentation of web pages and design a website with
- JavaScript: A scripting language to be used in the front end to program the behaviour of web pages.
- Bootstrap: To create responsive web design and aid the fast development of user interface.
- MongoDB: For Database management of the canteens' list, their respective menu, users' and orders' data.
- Flask: To code the backend of the website. to store and retrieve data from databases created.

4. Impact

This project aims to benefit both the IITR Junta as well as the Organiser Clubs and NGOs involved. This could give a major boost to the preparation of events and make learning of how to manage Events for students.

5. Timeline

5 December- 6 December

- Strengthening the concepts of HTML and CSS.
- Creating basic layout of homepage using the same.
- Creating the basic sketch of the login and sign up page.

7 December- 9 December

- Creating the required databases for Organizer details, Event admin and Events using MongoDB.
- Gaining proficiency in Javascript.

10 December- 13 December

- Creating the basic frame for organisers' webpage.
- Designing the basic sketch of volunteer' pages.

14 December- 18 December

- Creating the volunteer' page and working on the various options provided to the volunteer.
- Add final touches to the organisers' page.

19 December- 20 December

- Gaining proficiency in Flask to create the backend of a website and link it to the databases.
- Preparing for mid-term evaluation.

21 December- 24 December

- Writing the script in Flask to store data entered by the volunteer and organiser.
- Working on the apply page.

25 December- 28 December

- Use Flask to retrieve the data entered by the volunteer.
- Finalizing the complete backend of the website.

29 December- 3 January

- General code cleanup to make it tidy.
- Final touches to the website.
- Working on secondary goals if primary are completed.

6. Context

In today's fast-paced world, people often have the desire to contribute to their communities but lack the means to discover or connect with local volunteer opportunities. At the same time, many organizations and initiatives struggle to find reliable volunteers for their events and causes. This disconnect limits the impact of community-driven efforts and hinders individuals from making meaningful contributions.

7. About Me

I'm a nineteen year old fresher currently enrolled in Architecture at IIT Roorkee. An inquisitive soul with a perpetual desire to learn, I'll take this opportunity to explore the world of web development and learn about it as much as possible. In my opinion, my project is achievable in the proposed deadline and will give me a chance to gain knowledge about the different languages involved.