

Flashrom

GSoC

Proposal - Modernise the flashrom website

Personal Information

- **Name** - Shivesh Chaturvedi
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- **Timezone** - India Standard Time (GMT + 5:30)
- **Usual Working hours** - 8 AM IST to 12 PM IST
- **School / University, Degree Program** - Mechanical Engineer at Indian Institute of Technology, Kharagpur, West Bengal India.
- **Expected Graduation date** - 2024
- **Short bio / Overview of your background**- I'm a web developer who knows how to use Django. I am proficient in Python, C++, C, and JS. I've been practising development for over a year and have earned a lot of expertise through participating in hackathons and working as a freelancer. I also work at IIT Kharagpur's International Relations Cell as a full stack developer. In addition, I am familiar with React and have worked as a React js developer at IIT Kharagpur's Space Technology Student Society.
- **Other Commitments** - I'm a second-year student, therefore I normally have classes on weekdays during the day. I am a research intern in IoT under a Professor at Incheon National University.

Software Experience

If applicable, please provide the following information:

- Website, blog, microblog, profile on Github, Gitlab, etc

Github Profile - [DarK-VEnOM-16 \(github.com\)](https://github.com/DarK-VEnOM-16)

- Portfolio Website - [Shivesh Chaturvedi | Portfolio \(dark-venom-16.github.io\)](https://dark-venom-16.github.io)
- Currently Working Project -
 - Django Based Website|FreelancingProject [Project Link 1](#)
 - A Django website that allows students to post questions and tutors to answer them by bidding on the question.
 - There is a dashboard option for students and tutors to see all of their actions.
 - Feature like a payment integrated system and a private chat box

- Previously Worked Project -
 - TSG Hackathon Website|GroupProject
 - A Django website that would synchronise a student's academic, extracurricular and co-curricular information in one place. And would also provide an interface for different officials to perform specific functions.
 - A email otp based login system for students and username-password based for officials
 - The website provided an interface for a student to look at upcoming, past and on-going events, and a page containing all its certificates uploaded by Django admin.
 - A interface for Society governors and other officials to upload edit and delete there events
 - Ecommerce Website|GroupProject
 - A Flask website for a restaurant chain system.
 - The website has a hybrid database function.
 - Youtube Rest-API|SelfProject
 - A Django based Youtube Rest-API project, which fetches information about the videos about particular key points and then appends to the list of current tabular views of all videos in every 10 mins.
- Have you contributed to an open source project before? What was your experience?

Yes I have contributed to open source before, I had contributed to 2 small projects:

- First one was to add a C program for bubble sort algorithm
- Secondly I worked on updating the login page- I added the feature of login via both username, email password login. And also worked on the proper documentation of code.

The project was small but the experience gained from it was big. Now I am fully confident how git works.

- What is your software and hardware experience?

Software : I've built my career on **Django**, and I'm certain that I can make any logic with it, and I'm also skilled in **HTML, CSS, and JS**, so every web page is responsive and well-designed. I'm also familiar with **React js** and have some experience with it, having worked on the website of the Space Technology Adventure Society with their team. In addition, I am an expert **Python** programmer. I'm also studying machine learning, so Python is a must-have for me. I also do competitive coding in **C and C++**.

Hardware : I have worked on microcontrollers like - **Arduino UNO , Esp8266 , Arduino Nano**. And also have experience of building things from scratch.

- Did you build and run flashrom? Did you have problems?

No I didn't run flashrom I was mainly focusing on the website. I did try to look for flashrom tutorials and will definitely look more into flashrom at a later point of time.

- Did you do any patches for flashrom? Links to patches.

No I didn't did any patches on Flashrom

Project info

- Why are you interested in doing a project for Flashrom?

I've been a web developer for about a year, and after all of my projects, I'm convinced that I can build any site from the ground up. And this notion of creating a website from the ground up appeals to me much. I'm also a research intern in IoT integration at Incheon National University in South Korea, working under the supervision of a professor. As a result, I am also familiar with technological equipment, making Flashrom an excellent place for me to work where my job will impact all aspects of my enthusiasm.

- Short description of the project
Modernise the flashrom website

- Long description of the project

Because Flashrom's website is powered by wikimedia, it has an outdated UI with no self-registration and no database. As a result, the site must be modernised in order to address all of these difficulties. The user interface also required to be upgraded, as it currently appears to be outdated.

- Estimated project size (medium ~175 hours or large ~350 hours)

350 hrs

- Technologies to that can be used-
 - Django for backend

- Wordpress for whole site
- React can be used for frontends.
- Why is this a good project? (goals, benefits, what problems are you solving etc)

It's a good project since it will help a lot of people understand flashrom better by providing a simple, clear, and up-to-date interface. It will also make it easier for the flashrom community to maintain and update the website.

Goals: Create a fresh and new UI with database support to keep people interested, as well as a solid database support for many features and the admin panel.

Benefits - If the UI is user-friendly, Flashrom can attract more users. The user interface is the first thing a person interacts with when learning anything new. As a result, a user interface that is welcoming, clear, and interactive will benefit a large number of individuals.

Problem Solved -The issue of an unfriendly user interface will be resolved. Support for a database with an admin panel will make it easier for the Flashrom community to administer the server.

- Provide a breakdown of your project in small (weekly or fortnightly) steps

| TimeSpan | Plan |
|---|--|
| May 20 - May 31 (Community Bonding Period) | <ul style="list-style-type: none"> - Getting familiarised with FlashRom - Discussion with the community on which Technology to use - Making notes and workflow diagrams - Contact & Collaborate with other Gsoc Students on Flashrom |
| May 31 - June 12 (Community Bonding Period) | <ul style="list-style-type: none"> - Discussing all the possible solutions and features that are to be added to the website. - Discussion on Technology used in creating the website. |
| Coding officially begins! | |
| June 13th - June 27th (Week 1 & Week 2) | <ul style="list-style-type: none"> - Creating all the finalised frontend after discussion with the mentors. |

| | |
|---|---|
| June 27th - July 11th (Week 3 & Week 4) | - Integrating the features with the backend. |
| June 11th - July 18th (Week 5) | - Working on Debugging the code and making the code neat and simple. |
| June 18th - July 25th (Week 6) | - Work on Documentation of the code. |
| Phase 1 evaluation (July 25 - July 29) | |
| July 25th- August 8th (Week 7 - Week8) | - Work on the reviews received. - Work on refracting the code |
| August 8th- August 29nd (Week 9 - Week 10) | - Working on advanced features like Search button, giving edit access. |
| August 29th- September 12nd (Week 11 - Week 12) | - Finalise Documentation - Taking reviews - Working on reviews - Wrap Up |
| Final Submission and Evaluation (September 12 - September 19) | |

(Note: The timeline is to provide me with an idea and keep my work up to pace. I shall strictly adhere to it and plan on submitting individual PRs so that it's easier to review. Tests are an important component of this project. I'll also write tests and document the code simultaneously.)

- What risks or potential problems your project might experience?

Less knowledge about Flashrom might affect some places. Making a search option might be a tricky part.

- What would you expect as a minimum level of success?

Creating the fullstack site with at least all the features currently in there with upgraded UI is what i consider as a minimum level of success.

- Do you have a stretch goal?

My stretch goals aim to increase my contributions to Flashrom. I believe that having a discussion forum on the website would be more effective and useful since people will be able to find everything in one location.

- ... and any other important information that you would like to tell us.

I want to answer about why to select me:

I'm an enthusiastic developer, with rich experience in working on team projects. Also, I've known the importance of the various phases of web development. While developing anything I stress the design phase and testing phase. Also, I am a quick learner. It takes me very little time to go through particular documentation and grasp a new thing. Currently I don't know about the Flashrom but in the community bonding period I will get to cover this bridge.

I am known to meet hard deadlines. Some of the projects that I have worked on spanned around 4-5 months.

I promise to adhere strictly to the deadlines mentioned in the above table. I know my capabilities perfectly and have formulated the timeline accordingly. I would communicate with my mentor every week and will discuss my progress, objectives, or any issue that I am facing.

This project will be a very good learning opportunity for me. It will be my first contribution to such a big organisation and a noble initiative is impacting the Technology sector.