

Write Activity for Sugarizer

Personal Details

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Open Source Contributions

To improve the understanding of Sugarizer and the associated technologies, I have gone through the Development Tutorial for Sugarizer Application and contributed to the Codebase.

- <https://github.com/llaske/sugarizer/pull/283>
 - Fixed the issue of vanishing recent marks
 - The issue occurred in the Stopwatch Activity for the recorded times vanished after a few recordings
- <https://github.com/llaske/sugarizer/pull/282>
 - Fixed the issue of responsiveness in the Memorize Activity
 - Tested for all modern viewport dimensions
- <https://github.com/llaske/sugarizer/issues/280>
 - Related to PR #283, discussed with the maintainers the justification of the issue
- <https://github.com/llaske/sugarizer/pull/279>
 - Fixed unexpected token in JSON Error and stopping the Activity from hanging
 - Applied data cleaning before parsing

- <https://github.com/llaske/sugarizer/issues/278>
 - Identified the vulnerabilities of RegEx DoS due to deprecated dependencies in the Developer Electron JS build for Sugarizer
- <https://github.com/llaske/sugarizer/pull/277>
 - Added the Click and Drag Feature after discussion with the maintainers
- <https://github.com/llaske/sugarizer/issues/276>
 - Discussed with the maintainers and safely closed the mild issue of extent of zooming out in the Color My World Activity
- <https://github.com/llaske/sugarizer/issues/304>
 - Proposed the Chopsticks Activity for Sugarizer
 - Worked on the JS version of the proposed implementation and submitted for review by the maintainers

Other Projects I have contributed to:

- Mozilla Developer Network: Helped to fix a Bug in the Tutorial Code Example
 - <https://github.com/mdn/web-speech-api/pull/26>
- freeCodeCamp: Discussed Coding Practices with the Developers for the Example in the curriculum
 - I request you to read the discussion here. Lots of valuable inputs from the community.
 - <https://github.com/freeCodeCamp/freeCodeCamp/issues/25829>
 - The PR fixing the issue
 - <https://github.com/freeCodeCamp/freeCodeCamp/pull/25978>

Some things about me

Links to relevant projects:

- <http://utkarsh-raj.000webhostapp.com/RTEditor/RTEditor.html>
 - Simple Rich Text Editor developed in JS
- <https://github.com/utkarsh-raj/chat-mini>

- Group Chat Web App developed in JS to learn more about WebSockets
- Used in college for group communication
- <https://github.com/utkarsh-raj/umusic>
 - Web App for downloading your favourite YouTube Videos
 - Developed in JS with the help of the YouTube API
- <https://github.com/utkarsh-raj/chopGame>
 - The Japanese ChopSticks Game implementation in JS
 - An Activity with pedagogic elements
- <https://github.com/utkarsh-raj/apis-and-microservices>
 - APIs developed in JS for interaction through REST Interface
- <https://github.com/utkarsh-raj/RESTful-blog-app>
 - A Full Stack Web application developed in NodeJS
 - Utilizes MongoDB and has Express Framework and Semantic UI in the Frontend

I am an undergraduate at International Institute of Information Technology, Naya Raipur. I am a Full Stack Developer and I have worked in JS and Python. I am also the lead of Software Development Wing of the Technical Society of our College, and the Student Representative of CodeChef Campus Chapter (https://www.codechef.com/campus_chapter/IIITNayaRaipur). The part of my work involves giving lectures and conducting workshops for the Students.

Open Source has always fascinated me. I learnt Development and won a Global Hackathon organised by HackerEarth (<https://hackbenchers.hackerearth.com>). This gave me confidence to start with the Open Source Community and apply my knowledge to build software and get to learn from the most amazing developers.

I am confident that the Project will be a great addition to Sugarizer.

Project Details

- What are you making ?

The project I am proposing is The Write Activity for Sugarizer, which is related to the Idea in the Ideas Page:

<https://github.com/sugarlabs/GSoC/blob/master/Ideas-2019.md>

- How will it impact Sugar Labs ?

The Write Activity will be a wonderful addition to Sugarizer. Write is the Word Processing Activity provided by the Sugar Learning Platform. Everyone in today's world needs to have basic text processing skills. If the Write Activity is also developed for Sugarizer, because it is the Web Version, millions of students will benefit from the Activity by being able to learn the skills.

People in the parts of the World where it is not possible to have dedicated systems for the Sugar Learning Platform, will also be able to access the Write Activity in Sugarizer. Since we are planning to make the software with minimum dependencies, it will be easy for the community members and developers to maintain and enhance the Codebase to integrate better features.

- What technologies (programming languages, etc.) will you be using ?

I have prepared the implementation details along with the modules which are needed to be developed and the features which are to be incorporated, and also the technologies which can be used to implement the features. I request you to read the details.

Implementation Details:

https://docs.google.com/document/d/1cBNk_gXTosDvMUUhNCLb79FfiCrHY77gw782MtpqzP4/edit?usp=sharing

Timeline

I have designed the Timeline with almost all considerations, and the Timeline will be flexible according to the guidance by the Community and my Mentor.

- **May 6 - May 26 (Community Bonding Period)**
 - Work closely with my Mentor and the Community to develop constructive communication channels
 - Setting Up the Workstation
 - Researching and discussing with my Mentor the best possible ways to implement the features
 - Making Notes of the finalized practices
- **May 27 - June 2 (Week 1)**
 - Setting up the basic Sugarizer Activity
 - Integration of QuillJS

- **June 3 - June 9 (Week 2)**
 - Fonts Module
- **June 10 - June 16 (Week 3)**
 - UI Design
 - Sugarizer Toolbar Integration
- **June 17 - June 23 (Week 4)**
 - Buffer for discussion and fixing bugs
 - Documenting the Code

Deliverable 1 (First Evaluation) June 24 - June 27: **Basic Word Processing Tool with Fonts Module**

- **June 28 - July 4 (Week 5)**
 - View Module
 - UI Design
- **July 5 - July 11 (Week 6)**
 - Paragraph Module
 - UI Design
- **July 12 - July 18 (Week 7)**
 - Edit Module
 - UI Design
- **July 19 - July 21 (3 Days)**
 - Speak Module
 - Discussion and Documentation

Deliverable 2 (Second Evaluation) July 22 - July 25: **Enhanced Write Activity with all the mentioned modules**

- **July 26 - August 1 (Week 8)**
 - Table Module
 - Export Features
 - UI Design
- **August 2 - August 8 (Week 9)**
 - Image Module
 - Export Features
 - UI Design
- **August 9 - August 15 (Week 10)**
 - Presence Server
 - Journal Connection (probably from the testing Database Server)

- **August 16 - August 18 (3 Days)**
 - Discussion and Documentation

Final Deliverable (Final Evaluation) August 19 - August 25: **Full Working Prototype of the Write Activity for Sugarizer**

Estimated Working Hours per Week: 40 Hours

Your Motivation

- What is your motivation to take part in Google Summer of Code ?

Ever since I learnt to code, the idea of many developers coming together to make free, quality software for the benefit of the community, inspires and fascinates me to the core. I consider Open Source as my part in making the Internet a better place and making best products accessible to everyone.

In my opinion, Google Summer of Code is an opportunity to celebrate the spirit of Open Source - a chance to work with some of the best developers and contribute to a Codebase that will make millions of lives better. Months of writing code and learning with a noble purpose, what more can one ask for ?

- Why did you choose Sugar Labs ?

I am a resident of India, which is a developing nation. I believe the best asset any nation can have is an educated and informed population. The best time to instill the values in the people is when they are young, studying in schools. And since my nation is developing, it has been my long term goal to bring positive changes to the way of imparting education.

The way Sugar Labs has changed the scenario of education accessibility for all is truly remarkable. Sugar and Sugarizer can make children interested to learn more through pedagogic activities, and visual learning is proven to be one of the best ways to learn. It will be a great fulfilling experience for me if I get the opportunity to write code which can empower the young people across the globe.

- Why do you want to work on this particular project ?

When I was learning about computers when I was younger, the very first software which I was taught about was the Word Processor. I now realise the importance of Word Processing skills as almost every place now has computer based documents. The Write Activity in Sugar is an excellent basic Word Processing Tool and to increase the accessibility it will be great if the port to Sugarizer is done.

I have developed JS applications for the Web earlier and I feel that this will be a good opportunity for me to apply the knowledge which I have acquired in developing Front End Applications.

- What are your expectations from us during and after successful completion of the program ?

I am looking forward to a constructive long term relationship between myself and the organisation. During the program, occasional guidance and reviews will help me be in the right direction. I am confident that under the guidance of my mentor, I will be able to deliver awesome code !

After the completion of the program, I will definitely continue contributing to the Codebase and be a part of the community.