



Maintenance/bug fixes for Music Blocks 3

About Me

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GSoC Fill Time	:	Yes
Obligations	:	None
Links	:	GitHub Linkedin

Why SugarLabs?

I am looking for challenging coding opportunities so that my skills can get enhanced and my work impacts the betterment of society. Google Summer of Code 2022 provides the perfect opportunity. After going through the organization list of GSOC 2022, SugarLabs MusicBlocks is a perfect match for me. I have explored other open-source organizations and successfully set up them; however, after reviewing their project ideas and their wonderful community, I decided that I should focus on the SugarLabs project. Once this decision was made and after reaching out to the SugarLabs community, it proved to be a good fit for reaching my project goals. Becoming a part of this fantastic community not only for GSOC but, in the future, is planned. While being very well versed with the application stack that SugarLabs employs will give me a head start in the learning curve, I am also impressed by the sugar work which is dedicated to the children and promotes collaborative learning through various sugar activities and developing their mindset in a fun way.

The Project - Maintenance/bug fixes for Music Blocks 3

Synopsis-

The primary goal of this Project is to maintain Music Block 3,0 and add some features after discussing with the mentors as well. Currently, the website has some major issues, and it's not mobile-responsive as well. My goal is to make it a fluid website that can work on all kinds of devices so that a larger number of users can use and take benefit of it.

What it means to accomplish-

- Fixing issues like-
 1. Improving the layout and Designing of the site
 2. Fixing Scrolling Problem in the Music Block
 3. Making Grid Section (a system to identify the release of digital sound recording for electronic distribution) which is present on the navbar of the site and currently not working.
 4. Adding more languages and solving specific language-related issues.
 5. Fixing High-Priority Issues

- Making the website responsive for all types of smartphones and tablets but I would like to focus more on tablets and i-pads as this project is made for children to learn music and the best method of learning any creative is on the big screen which is also economic and I feel i-pads and tablets are the best for it.

- Adding feature likes (after discussion with mentors)-
 1. Adding a footer on page
 2. Adding different inbuilt blocks of different rhymes and Poems for Children
 3. Making a separate page for tutorials to teach the new users about the music, different instruments, and the working of the websites with the help of videos and screen recordings



4. Adding a collaboration section in which two users can work together and pass short messages while making music content.
5. Theme Button (Dark and Light mode)

How to accomplish-

Dividing the whole project based on three priority-based systems so that at the end, the output will be maximum and if something is left it can be done in an Extended coding period with the guidance of mentors.

High-priority and some Mid-priority features complete the website while the low-priority features make the website user-friendlier. Since we have time limits these friendlier features are put on low -priority but I feel they are important and needed to be worked on even during the extended coding period or after the GSoC with the guidance of mentors.

The Priority list can be updated from time to time with the guidance of the mentors.

Priority Order	Issues	Execution approach
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High Priority	<ul style="list-style-type: none"> ● Responsiveness of the website 	Some hardcoded pixels size are needed to change and convert into percentages or more practical sizes and add the different positions of some specific elements according to different devices. Tailwind CSS and Bootstrap libraries can be used in better ways.
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	<ul style="list-style-type: none"> • Adding a footer on the page and improving overall styling • Implementing Basic DAW Functionality 	<p>The footer is the one that completes any website and on the footer, we can add more information and links to other Sugar Product</p> <p>By implenting features like recording and adjusting volumes .</p>
Mid Priority	<ul style="list-style-type: none"> • Implementing theme button • Making a separate tutorial section for the users. 	<p>Dark theme functionality can be achieved by making a separate CSS file for it and implementing a toggler to toggle between the dark and light modes with the help of JQuery</p> <p>A special HTML page dedicated to teaching users about the music Instrument and the working of the website</p>
Low Priority	<ul style="list-style-type: none"> • Collaboration Section • Different inbuilt Rhyming and Poem blocks for users 	<p>A chatting system can be implemented between the users who are working on a single block with the help of node js and socket.io</p> <p>Currently the website has only one default MusicBlock. It will be better if some more can be added.</p>

Timeline-

Before the Community Bonding Period

- Contribute in general to SugarLabs.
- Fix the open issues.
- Discuss different possible approaches for the project with the mentors.
- Learn More about the technologies used for the Project.

Community Bonding Period

- Introduce myself to everybody.
- Explore the codeBase and the discussion with the mentors about the enhancement and addition of the new features
- Participating in Sugar activities and meetings
- Identify the issues and discuss them with the mentors

Coding Period

May 29 to July 10

May 24 to June 10


- Refactoring the Existence Implementation
- Solving the low hanging Good First Issues

	<ul style="list-style-type: none"> • Solving Component Based JS issues
June 11 to June 25	<ul style="list-style-type: none"> • Finding the Bugs related to Design and fixing them such as scrolling issues and adding footer for the websites • Start working on these Bugs
June 26 to July 10	<ul style="list-style-type: none"> • Fixing High Priority such as grid as mentioned above

July 14 to August 15

July 14 to July 25	<ul style="list-style-type: none"> • Solving High Priority architecture issues • Making site Responsive
July 26 to August 5	<ul style="list-style-type: none"> • Adding major features and Testing them. • Solving Browser-Specific Issues • Adding Documentations
August 6 to August 15	<ul style="list-style-type: none"> • Fixing Bugs for newly added features • making the website fully responsive

Buffer Period - August 15 to August 25



This period is allotted for the finishing of the webpage and in case given tasks are not completed according to the timeline then this time will be utilized in finishing them.

PerExpectation From Mentors

- Help me understand the existing code of Sugar whenever I am incapable of doing so on my own.
- Suggest me some study material to have a clearer view of how things are done ideally.
- Help me come to a decision when I have more than one way of doing things and tell me why that is the best option.
- Take time to review my work and provide timely insight.

Commitments

Important: My university Exams are scheduled for the 2nd week of June. I will be fully prepared for the exams so the timeline will not get disturbed for more than 5 days. All of it will be compensated on Weekends. I have no other commitments other than GSOC.

I will be available for at least 40 hours a week through online platforms and am ready to extend whenever needed. I would be working full-time for GSOC. I have no exams so I shouldn't have any problem.

After GSoC,

I would like to keep contributing to SugarLabs and will be available to resolve issues and manage pull requests. Even if I am not selected this year, I will like to help this project by resolving issues, suggesting new ideas, and participating in discussions. I usually help out people with code and will love to mentor some young coders.

Introduction

I am in the third year of my Bachelor in Computer Science Engineering course. Computers especially software part have always interested me. I find myself as a coding enthusiast who is on a journey of learning something new each day of my life and a future full-stack developer. I have always loved working on algorithms and their visualizations emphasizing writing readable code. It has been 3 years since I started programming. I am very comfortable with, Frontend technologies like HTML, CSS, JavaScript as well TypeScript, and also learning ReactJS and Backend -NodeJs, ExpressJs as well MongoDB for Databases and have also experience in C/C++ and Python. I also have good experience in Git, Javascript, MySQL, and other technologies, and also worked on developing RESTful APIs. My major interest is in Data Structures and Algorithm Design and practicing my coding skills on HackerRank and CodeChef-like platforms. I have also written web application programs and developed websites that are available on my GitHub account. I developed the habit of reading the readme Files and writing code first on paper to improve the efficiency of my work and hence I can write clean and efficient codes. I am looking forward to the challenges awaiting me. In my opinion, the main objective of GSoC is to learn and gain experience, I hope to accomplish that.

Projects And Participations

Schedule Manager

Tech stack- HTML, CSS, JavaScript, NodeJS, MongoDB

A website that helps to make a to-do list

GitHub-<https://github.com/MohitGupta14/TODOList.git>

Unstop Hackathon

Made a Website for DaretoCompete in which users can register themselves in a Particular course of their choice.

Tech stack- HTML, CSS, EJS, JavaScript, NodeJS, MongoDB, ExpressJS

URL- <https://codevita1.herokuapp.com/>

GitHub-<https://github.com/MohitGupta14/codevitaHackathon>

Devpost Hackathon

This project is a part of the Hackathon event organized by devpost which is about the demonstration of the usage of the courier. We have incorporated the courier API and tried to give an easy and single-page approach to sending emails with templates to the desired person using courier API.

Tech stack- HTML, CSS, JavaScript, ReactJS, NodeJS, MongoDB, ExpressJS

Github-<https://github.com/MohitGupta14/Courier-Hacks>

Contributions

Merged PR with Sugar(MusicBlocks) -

[#3237](#) - Fixing the image issue and the functionality of the Movable Do block

[#3229](#) - Making Take a tour section Responsive for smartphone Screen/

Open

[#3250](#) -Working on Recording Feature

Other - [All Pull Requests](#)

References-

<https://www.sugarlabs.org/>

<https://www.sugarlabs.org/music-blocks/>

<https://github.com/sugarlabs/musicblocks/issues>