GSoC '19 Project Proposal

Improve & Maintain 25 sugar activities

Basic Details

Full Name

My name is Aniket Mathur and I am 2'nd year E.C.E undergraduate student at the **Indian Institute of Technology Roorkee**.

Email and Github Username

Email: amathur@ec.iitr.ac.in , aniketmathur320@gmail.com
Username: Aniket21mathur

Your first language

My first language is Hindi and I am proficient in speaking and understanding English.

Location and Timezone

Location: Paonta Sahib, Himachal Pradesh, India .
Timezone: UTC +5:30 India Time Zone

Share links, if any, of your previous work on open source projects?

In my freshman year, I got introduced to Github and web development. Since then I kept myself involved in developing and learning about software. I made it a practice to regularly push my work to Github, the contribution map full of green dots really fascinated me and it also helped me to get my code reviewed and improved from my colleagues.

I worked on some of my personal small scale projects for learning purposes, which can be found on my Github profile Aniket21mathur .

Convince us that you will be a good fit for this project, by sharing links to your contribution to Sugar Labs.

I am an active contributor to Sugar Labs for the last three months and now I am quite comfortable working with the code base of Sugar Labs. Now I am familiar with Sugar-desktop and I know how it works. Most of my contributions are two core sugar-activities. I also have experience of maintaining activities on ASLO as I released across-and-down-activity on ASLO.

I am coding in python for the last 1.5 years, I have done a lot of small projects in python which can be found on my Github profile- Aniket21mathur .

Following are some of my other major involvements:

Moodcafe

- ❏ One month long internship. Worked on the backend of their mobile app, coded in Nodejs with MongoDB database.
- ❏ Added some new features like group chat and improved existing algorithms.

Alumni Website

- ❏ Being a part of the Institute Alumni Relations Cell (IARC) of IIT Roorkee, I contributed to the new official alumni website of the campus, coded using the Django framework of python.

These are some of my pr's:

- https://github.com/sugarlabs/sin-dientes-activity/pull/8
- https://github.com/sugarlabs/convert/pull/21
- https://github.com/sugarlabs/sin-dientes-activity/pull/13
- https://github.com/sugarlabs/myosa-examples/pull/2
- https://github.com/sugarlabs/musicblocks/pull/1679
- https://github.com/sugarlabs/fossrit/pull/5
- https://github.com/sugarlabs/collabedit/pull/6
- https://github.com/sugarlabs/across-and-down-activity/pull/12
- https://github.com/sugarlabs/convert/pull/20
- https://github.com/sugarlabs/maps-activity/pull/12

Also for all the time, I am contributing to Sugar Labs I have over **40 pull requests** made and about **45 commits** in the code base of Sugar Labs.

Link to all my commits.

Project Details

What are you making?

The aim of this project is to maintain and release 25 sugar activities. There are a lot of sugar activities, with 250+ on GitHub, and more elsewhere. These activities have scope for improvement including bug fixes, features, update human translations, and release. This project includes selecting 25 activities that are either a part of sucrose or have strong pedagogical value, working on and releasing them.

Activity selection:

I tried to make my choice biased towards those activities which are either a part of fructose or have a strong teaching value.

★ Convert

Convert is a measurement unit converter activity.

Issues to work on:

- Save last used dimensions and units in journal object. I Did partial work here.
- Remove the swap button through design changes. Changes are discussed here.
- Other fixes:
    - Starting the activity shows no units selected.
    - Switching between unit ranges using the toolbar doesn't select any default units.
    - Entering 9 shows `9.0 ~ -9.00000000001`, it should be `9 ~ 9.`

My previous contributions:

- Fixing Superscript problem.
- Use text entry for value.
- Remove convert button.

★ Chat-activity

Chat is an activity used to exchange messages with friends or classmates. You can chat about a topic you are studying or you can share something private that happened in your life.

Issues to work on:

- Feature: advice on connection progress. Discussed here.
- Feature: drawing and quoting. Discussed here.

★ Infoslicer

InfoSlicer downloads articles from Wikipedia so that you can create new documents by dragging and dropping content from Wikipedia articles.

Issues to work on:

- Fix Traceback. Discussed here.

My previous contributions:

- Fixing misbehavior of the content box.

★ Browse-activity

Browse is a web browser activity for the Sugar desktop.

Issues to work on:

- Enhance browser homepage.
- Gtk-WARNING: Failed to set text from markup.
- Search in the address bar is redirecting to the website's search plugin.

★ Get books-activity

Get Books is a book browser and downloader.

Issues to work on:

- Add Project Gutenberg.

- Search without an internet connection says nothing. I did partial work, here.

My previous contributions:

- Fixing the widening of the download box canvas.
- Add README.

★ Terminal-activity

Issues to work on:

- Feature: URL open in Browse
- Bug: Help button not working
- Improve Readme.

★ Calculate-activity

The Calculate Activity is an infix-notation graphing calculator.

Issues to work on:

- Sin, cosine and tangent are expecting integers in Degrees mode.
- Added Basic UI and Unit tests.

★ Collabedit

A collaborative text editor widget that sugar activities can embed.

Issues to work on:

- Add readme.
- Undo, redo, copy and paste keys are not working.

My previous contributions:

- Fix duplicate accelerator.
- Remove character insertion restrictions.

★ Activity-erikos

Issues to work on:

- Sounds are interrupted often.
- Add Readme.

My previous contributions:

- Fixing sprites.draw:no Cario context.

★ Flappy-bird-activity

Flappy Birds is an arcade game for the Sugar desktop.

Issues to work on:

- There is another activity similar to this. But there is no need for two different repositories. So below is the task checklist:

    -see what's different between the two, (also review git histories).

    - implement the features missing in one but present in the other.

    - delete the other repository.

Discussion can be found here.

★ Finance-activity

Issues to work on:

- Add readme.
- Update list after changing time period.

My previous contributions:

- Fix reference error.

★ Fossrit

A puzzle activity.

Issues to work on:

- Improve Readme.
- UI improvement required.
- ASLO release required.

My previous contributions:

- Port to GTK+3
- Fixing on_child_exit function TypeError

★ Gogo

Issues to work on:

- Improve Readme.
- Missing license.
- Port from GConf to Gio.Settings.
- Embedded PyLogoCompiler has no license.

★ Write-activity

Write is a word processor activity for the Sugar desktop.

Issues to work on:

- Feature: save and restore edit point
- Port to sugar3.speech. Partial work is done, here.
- Errors raised on clicking 'Save as Hypertext'.

★ IknowEditor

A sugar activity to create 'iKnow' activities.

Issues to work on:

- Update Readme.
- Write documentation for teachers.

★ Read-sd-comics

Issues to work on:

- There are a number of fixes to be done for the activity. The description is here.
- Activity version not published.

My previous contributions:

- Validate all characters inserted into page number entry.
- Use default stop accelerator.
- Port from GConf.

★ Bichos-activity

Issues to work on:

- Delete repository.

★ Physics

Physics is a box2d playpen.

Issues to work on:

- Existing objects not shared
- Keep Error; KeyError: 'saveid'
- Bouncy objects bounce higher and higher

My previous contributions:

- Update POT file
- Fix PyGObject warnings

★ Dimensions

Dimensions is a pattern-matching game.

Issues to work on:

- Image persists when it shouldn't.

★ Maze-activity

A simple maze game for the Sugar learning environment.

Issues to work on:

- Add to Help Activity.
- Add Holes. Work in progress here.
- Add readme.
- Release a new version.

★ GTranslator

Issues to work on:

- Unconnected forks to be merged.

★ Memorize-activity

A memory game, not only to play but also to create your own games.

Issues to work on:

- Port speak/ to sugar3.speech
- Redesign 5x5 tiles page

My previous contributions:

- Fix PyGIWarning for Gdk.

★ Jukebox-activity

A media player for the Sugar learning environment.

Issues to work on:

- Enable visualisations in the playbin element for audio content.
- Add collaboration for sharing playlist items.

★ Falabracman-activity

Issues to work on:

- Port activity from olpcgames to sugargames.
- Create readme.md file for this repository.

★ Teacherteacher-activity

Issues to work on:

- Activity requires internet.
- Add Readme.md.

How will it impact Sugar Labs?

All of the activities that I have selected needs maintenance and release. It is really important for Sugar Labs to have well functional and maintained activities, as these activities are used by teachers and children. This project will provide Sugar Labs with 25 well functional activities the latest version of those will be released on https://activities.sugarlabs.org.

Deliverables:

- 25-well maintained activities for Sugar Labs.
- A newly released version of these activities.

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

The Major part of the project will involve coding in **Python** and the use of **sugar-toolkit-gtk3**, **Pygame,** and **Sugargame**.

<u>Timeline</u>

27 May, 2019 to 10 June, 2019	● **Start solving issues.** ● **Maintain 10 sugar activities and make fixes in them.** ● **Keep discussing with mentors and clear doubts.**
11 June, 2019 to 16 June, 2019	● **Discuss final changes with mentors before releasing the activities.** ● **Release the first 10 activities.** **(May include other related work as suggested by mentors.)**
17 June, 2019 to 25 June, 2019	**Maintain 5 other sugar-activities.**
25 June, 2019 to 28 June	**Discuss final changes with mentors before releasing the activities.**

Phase one evaluation

29 June, 2019 to 10 July, 2019	● **Release the 5 activities maintained in phase one.** ● **Maintain other 5 sugar activities and make fixes.**
11 July, 2019 to 18 July, 2019	● **Discuss final changes with mentors before releasing the activities.** ● **Release the 5 sugar activities.** **(May include other related work as suggested by mentors.)**
19 July, 2019 to 26 July, 2019	**Start fixing issues of the remaining activities. (May include other related work as suggested by mentors.)**

Phase two evaluation

27 July, 2019 to 4 Aug, 2019	Maintain the remaining activities.
5 Aug, 2019 to 12 Aug, 2019	● **Discuss final changes with mentors before releasing the activities.** ● **Release the remaining activities.**
13 Aug, 2019 to 19 Aug, 2019	Review the entire work done during summers and make necessary documentation.(May include other related work as suggested by mentors.)

19 Aug, 2019 to 26 Aug, 2019	**Make final submission and discuss future aspects with mentors and the community, which will include:-** ● **Review from the community regarding the impact of the project.** ● **Opening issues for improving other activities and discussing those issues with the community.**

Note:- I have not mentioned which activities will I work on first. I have only mentioned the no of activities that I will target during various evaluations. I did this to keep my timeline flexible and let me decide which activities to work on first after discussing with my mentors, depending on their value to the organisation.

If targets mentioned in the timeline are completed before or the timeline leaves me with some free time for some reasons then I will discuss with my mentors and involve myself in **solving general issues** of other activities and contribute to the codebase,.

How many hours will you spend each week on your project?

 My summer vacations are starting from 1 May to 15 July, in that period I can give about 45-50 hours per week and after college starts, I will be able to manage 35-40 hours a week. I have no other commitments for the summer vacations, so I can devote most of my time to GSoC.

Discuss your post-GSoC plans. Will you continue contributing to Sugar Labs after GSoC ends?

I am planning to continue working on the project after the program ends. I am also thinking of mentoring other open-source programs for Sugar Labs in the future.