

Proposal for Sugar Dashboard Project

Introduction

Name: My name is Hrishi Patel. I am currently pursuing Computer Engineering at SAL Engineering and Technical Institute, Ahmedabad, India (2nd year).

Email Address: hrishipatel99@gmail.com, hrishi@sugarlabs.org

GitHub: [hrishi1999](https://github.com/hrishi1999)

First Language: My first language is Gujarati. I can also speak English and Hindi fluently.

Location and Timezone:

I currently live in Ahmedabad, Gujarat. My timezone is Indian Standard Time (UTC+5:30). On a weekday, I could work from 5:30 AM UTC to 3:30 PM UTC, but may vary sometimes because of college work. I would be working for an extended period during weekends.

Previous work:

I've worked on many open-source projects. I've also open sourced some of my Hackathon and personal projects. They can be found at my GitHub profile (<https://github.com/Hrishi1999>). A side note, I've been with Sugar Labs since Google Code-In 2014. I've been a part of open-source programmes by Google like Google Summer of Code (as a mentor) and Google Code-In (as a student, mentor). Some of the PRs I have opened under Sugar Labs are:

- <https://github.com/sugarlabs/sugar/pull/826>
- <https://github.com/sugarlabs/read-activity/pull/31>
- <https://github.com/sugarlabs/terminal-activity/pull/33>
- <https://github.com/sugarlabs/riverhex-activity/pull/7>
- <https://github.com/sugarlabs/musicblocks/pull/1126>
- <https://github.com/sugarlabs/musicblocks/pull/758>
- More can be found at my profile

My Motivation

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

Open-source has always amazed me. The idea of people coming from different places to work on a project together is amazing. One of the main reasons I am participating is to help other people around me learn about the things I learn. Very few people in my college have heard about open-source programmes like Google Summer of Code or even anything open-source. I would like to change that. I recently started a club at my college which promotes open-source activities.

Moreover, I've always been interested in programming. GSoC would help me to improve my skills and help me be ready for industry.

Why did I choose Sugar Labs?

Community, Goal, Codebase

Sugar Labs has taught me a lot of things along the road. I've met such great people who contribute to Sugar Labs. Several mentors helped me complete my tasks during Google Code-In. I never would've known the true meaning of teamwork and open-source projects if it weren't for Sugar Labs.

Sugar Lab's goal is to help learners. This matches with my goal to help others succeed by keep learning. The community is full of helpful people and I love to be a part of this community.

Why do you want to work on this particular project?

I already have a good experience with Python, and I am familiar with using Sugar. I would like to refine my knowledge about GTK and Python during this period.

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

I will update mentors about my work every day, so I expect mentors to give me valuable feedback so I don't do something wrong and hence we can save time.

After successful completion, I would like this project to be published and to go on, I would still keep contributing to the project. I would also work on other Sugar projects after GSoC ends.

Project Details

What are you making?

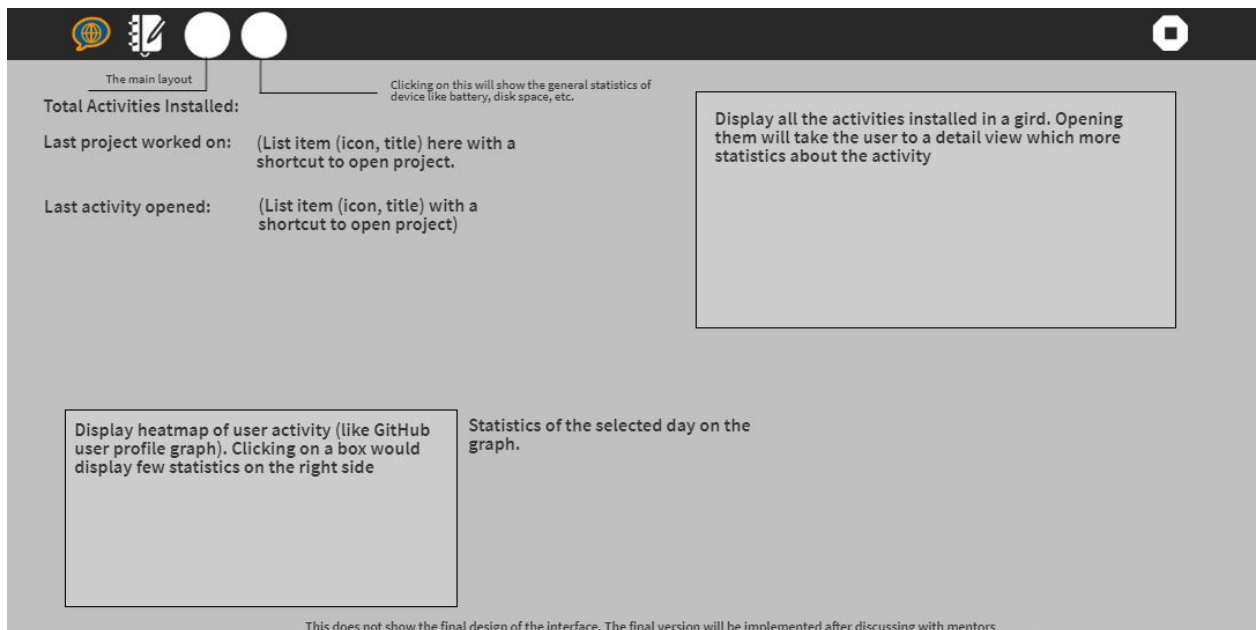
The project is broken down into two parts:

1. Creating the Sugar Dashboard

The Dashboard would be an activity. It would show various information like last activity worked on, the last project worked on, total activities installed on the system, most used activities, along with visualization with the help of piecharts and heatmaps (similar to GitHub user activity graph).

Information like battery status, disk space, devices connected would also be shown.

Image 1: Shows the main view.



There would be separate layouts/pages for 1) User Activity 2) Device information. Device information would show disk usage, battery percentage, etc.

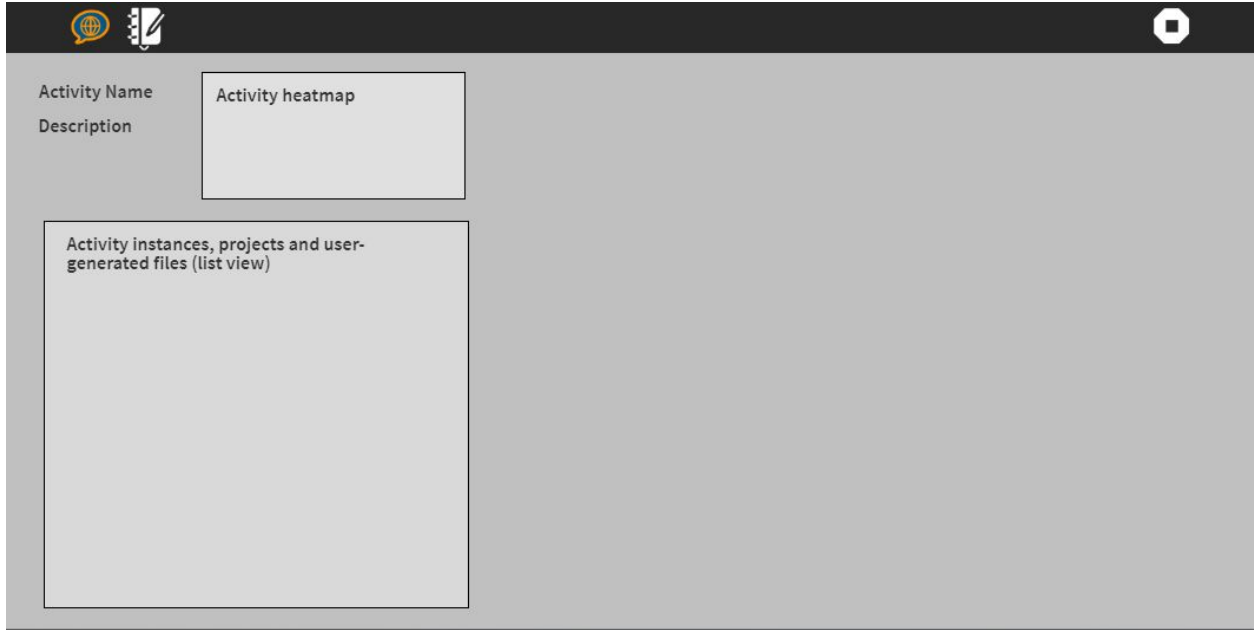


Image 2: Shows the detail view when an activity is clicked.

The UI mockup is shown in the image above. This is not how the final version of the Dashboard will look.

2. Tamagotchi Widget

This widget will be a modification to the existing XO icon at the center of Sugar Desktop. The XO would change its shape with respect to status of the battery, disk usage, etc.

Another idea which can be implemented is to show the status like battery and disk usage in the context menu when you click on the XO icon.

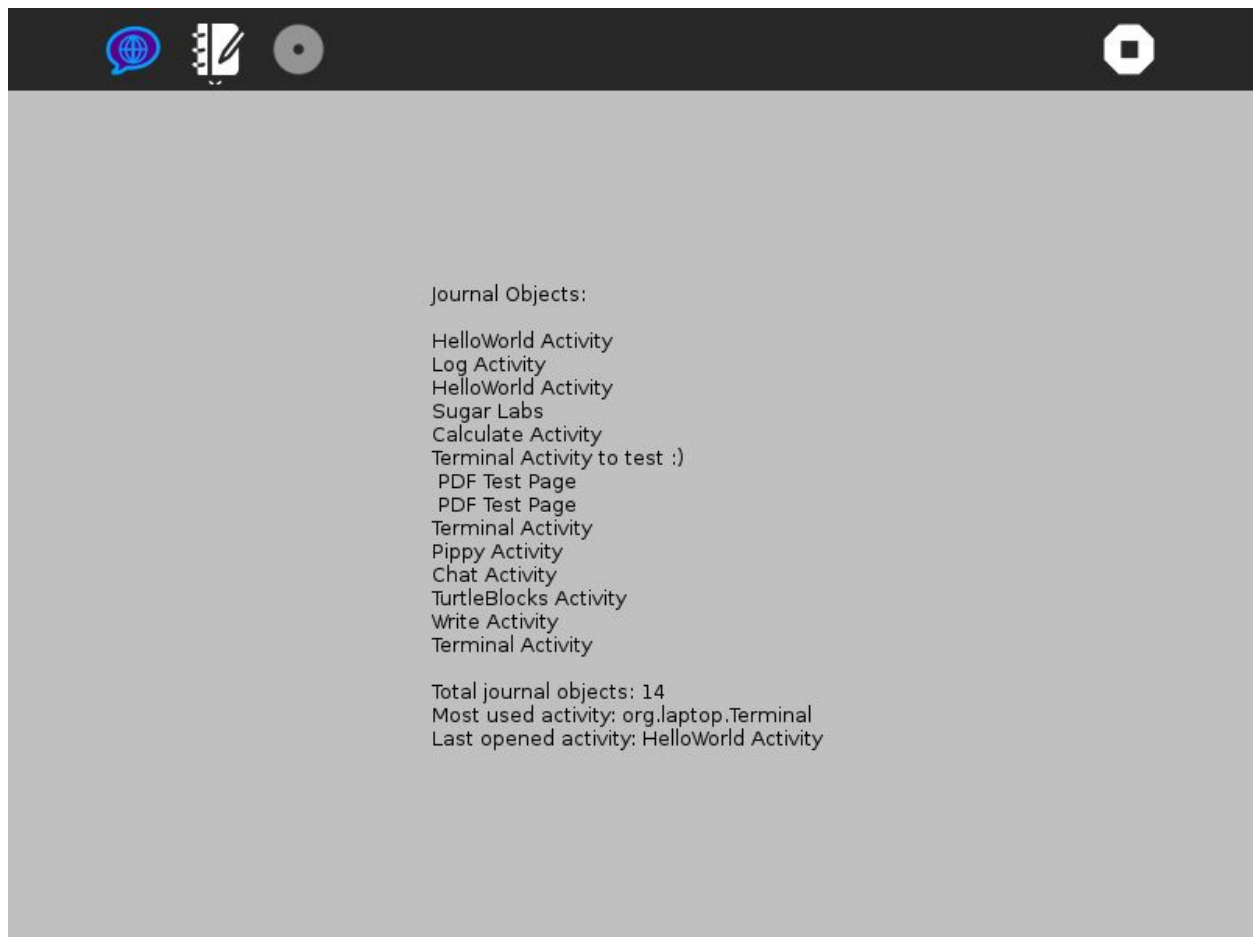


3. Journal-like activity

In this task, an activity similar to the Journal is to be created. The Journal is a core part of sugar which cannot be easily extended or modified by the end user easily.

This will make modifications to Journal activity easier.

I've been trying to learn by applying what I learn practically. Here is the test activity I made to learn by using Sugar Datastore



How will it impact Sugar Labs?

The dashboard will let the users track their activity. The Tamagotchi widget will help the user know about their battery, disk, etc usage at a glance. The Journal-like activity will be an activity which will be more extendable by end users, so they don't have to mess with core sugar if they need to make a change.

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

I will be using Python along with the GTK+ 3 toolkit. I will also be using Inkscape.

Timeline

Period	Task
May 6 - May 27	<ul style="list-style-type: none">• Learn about core Sugar components like Journal, and Datastore. Read the documentation about GTK• Discuss with mentors about the UI/UX, features, and prioritize them accordingly
May 27 - June 10	<ul style="list-style-type: none">• Start working on the user interface (dashboard)• Implement basic functionality
June 10 - June 20	<ul style="list-style-type: none">• Complete the user interface• Start working on the functionalities
June 21 - June 30	<ul style="list-style-type: none">• Improve the Dashboard project and proceed to complete it• Alongside, start planning the Tamagotchi widget
July 1 - July 10	<ul style="list-style-type: none">• Start working on Tamagotchi widget• Create different variations of the XO icon in Inkscape
July 11 - July 20	<ul style="list-style-type: none">• Work on the programming the functionalities of the widget
July 21 - July 31	<ul style="list-style-type: none">• Complete the rest of Dashboard and Tamagotchi• Start working on the Journal-like activity, plan out its features and user interface
August 1 - August 15	<ul style="list-style-type: none">• Complete the Journal activity
August 16 - August 26	<ul style="list-style-type: none">• Complete work on Tagamotchi and Dashboard, find issues and fix them.

I will try to be as active I can be during the community bonding period. My 4th-semester exams are from 13th May to 25th May. In June, I would be working for extended periods because of summer vacation.

I will also be writing blogs about my progress weekly.

Sugar Labs' Motivation

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

I have had experience working with the Sugar Labs community and their projects. I have also worked with several different platforms, frameworks, languages, etc. I have experience in working with hackathons, that is, teamwork. During hackathons, I have a record of completing the project under a given period (most of them are for under 36 hours). I will keep learning and contributing no matter I get selected or not.

I wrote my first program when I was 11. You can find many of the projects I worked on at my GitHub profile: <https://github.com/Hrishi1999/>

I recently started a computer club at my college so more people can learn about different languages, platforms, development, etc.