Maintain and Port Sugar activities to Flatpak

Basic Details:

- **Name:** Sparsh Goenka
- **E-mail:** sparshgoenka@gmail.com
- **GitHub Username:** sparshg
- **Languages:** English, Hindi, Punjabi
- **Location and Timezone:** India (IST, UTC+5:30)

I am a second-year undergraduate student pursuing Computer Science at Birla Institute of Technology and Science, Pilani (BITS Pilani). I am fascinated by the idea of open-sourced projects, and how anyone can access and contribute to the project. I really enjoyed working with Sugar Labs in GSoC 2022.

Past Work & Experience:

- **Google Summer Of Code, 2022**
  I contributed to Sugar Labs in GSoC 2022 and maintained 12 sugar activities. I got 52 PRs merged. Here is the link to my student report.

- Manim Community Edition
  I have also made some significant contributions to [manim](), a python framework to create precise mathematical animations programmatically, as demonstrated in the videos by [3Blue1Brown]().

  [Here]() are some of my contributions in manim.

- Projects
  - [Interactive AI Training Simulation]()
    Made in Rust, without any AI library, just math.

  - [Automatic Wi-Fi Login]()
    Made in Kotlin, for the students at my university.

Project Details

Type: Large

A number of Sugar activities are bundled with Flatpak as a way to reach a broader audience within the Linux community.

This project aims to keep those activities up to date and also port new sugar activities to Flatpak. This also includes updating the two popular activities [Pippy]()

and [Physics](#) to pygame 2.x as these are still on an unsupported version of pygame.

There are 26 activities on [Flathub](#) out of which 19 need to be updated. The version tag will be incremented in the base activity repository, with an updated changelog if required.

I have already ported BlockParty activity to flatpak [here](#).

Timeline

Community Bonding Period:
During this period, I will interact with my allotted mentors and try to start updating the Pippy and Physics activities. I will try to understand the codebase in-depth and tinker around more.

Coding Period:
I may change the order of the activities updated in the timeline, or the new activities that I will port to flatpak after discussing with the mentor.

Timeline	Activities Involved	To Do
Week 1	Pippy	Port to pygame 2.x and update flatpak bundle
Week 2		
Week 3	Paint, Music Keyboard, Maze	Update flatpak bundles
Week 4	Finance, Abacus, Sugar Chess	Update flatpak bundles
Week 5	TicTacToe, JAMath	Port to flatpak
Week 6	Ball and Brick, NumberRush	Port to flatpak

Mid-Term Evaluation

Till this point:

I aim to port at least 4 new activities to flatpak.
I will update Pippy to pygame 2.x
Update a few other activities as mentioned above.

Timeline	Activities Involved	To Do
Week 7	Physics	Port to pygame 2.x and update flatpak bundle
Week 8		
Week 9	Read ETexts, Chart, Story, Implode	Update flatpak bundles
Week 10	Turtle Pond, Music Blocks	Update flatpak bundles
Week 11	Color Deducto, Words, Memorize	Update flatpak bundles
Week 12	Dots and Boxes, Jumble	Port to flatpak

Final Evaluation

Till this point, 6 new activities will be ported, and all the activities on Flathub that require an update will be updated.

To report the progress between evaluations, I can create GitHub markdowns, or give updates via email.

I wish to continue contributing to Sugar Labs and also apply as a mentor next year.