

hello!

welcome!

Introduction to Open Source Contribution with the p5.js Editor

What Are We Doing Today?

3:00 pm: Introductions (30 min)

3:30 pm: What is Open Source? How Does That Relate to the Processing Foundation? (20 min)

3:50 pm: Github Walkthrough (1 hr)

4:50 pm: Hands-on Contribution Activity (1 hr)

5:50 pm: Collaborative Review and Next Steps (10 min)

Who Am I?

p5*js

Reference
Tutorials
Examples
Contribute
Community
About



Rachel Lim
p5.js Editor Lead, 2022-present

Rachel Lim (she/her) is a Korean-American programmer whose works explore articulating vulnerability, discomfort, and grief with gentleness and humor. She is currently a software developer within the edtech space. She holds a master's degree from the Interactive Telecommunications Program at NYU, where she also received a BA in Art History. In her spare time, she loves crafting knick-knacks and running outdoors.

p5.js Mentors



Kenneth Lim (he/him) is an interaction designer and creative coder working with text and language in all its forms. His work and research focuses on translations, machine understanding of language, and development of language in the modern

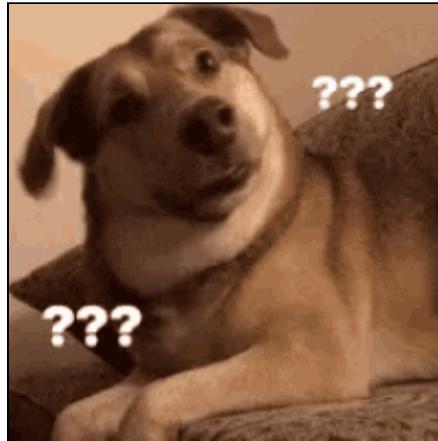
</> Start Coding

♥ Donate

Who Are You?

- What are your name and pronouns?
- Have you contributed to an open source project before?
- What brought you here? What are you hoping to learn from today's workshop?
- Anything else!

What Does Open Source Mean?



What Does Open Source Mean?

“Open Source” can refer to anything where the design, content, or source is publicly available and can be used, modified, and shared.



What Does Open Source Mean?

Whether something is open sourced or not depends on if they have a **LICENSE**.

What is a License?

An **Open-Source License** is a license that allows and dictates how content is used, modified, and shared.

What is a License?

Open-Source Software License Types

Copyleft Licenses	Permissive Licenses
GNU General Public License (GPL)	Apache License
GNU LGPLv3.0 (Lesser General Public License)	BSD License
Mozilla Public License	MIT License
Eclipse Public License	Unlicense

What is Open Source Software?

”Open source doesn’t just mean access to the source code.”

The Open Source Definition



open source
initiative®

What is Open Software?

STRAWBERRY CAKE (Mrs Oklahoma)

1 pkg. white cake mix
2 T. sifted flour
1 box strawberry gelatin (dry - dessert)
1/2 C. water
3/4 C. cooking oil
4 Eggs
1/2 C. Frozen strawberries, thawed

Add flour, gelatin, water, oil & unbent eggs to cake mix in bowl. Beat 2 min - medium speed, until smooth. Add frozen strawberries & beat one min., or until thoroughly mixed. Pour into two greased & floured 9 in layer pans. Bake at 350° - 30, 35 min. Frost with cream.

Frosting

1 cube margarine
1 box confed. sugar
1/4 tsp. salt
1/2 C. frozen strawberries

Cream marg until smooth. Add C. sugar, few Tbsp. at a time, & salt. Add strawberries as needed to mix in sugar. Beat thoroughly.

Vintage Recipes/Mrs-Oklahoma-Strawberry-Cake



Source Code

Software Program

What is Open Software?

Closed Software



Source Code

Software Program

Open Software



Source Code

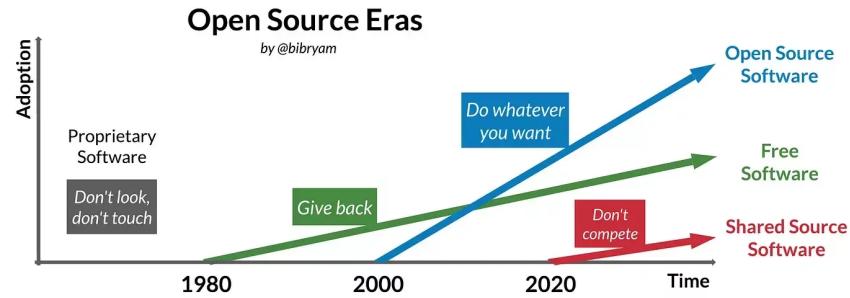
Software Program

What is NOT Open Source Software?

- Proprietary Code
- Public Domain Software
- Freeware
- Any software that are freely available without access to the source code.

Where Did Open Source Come From?

Open Source Eras			
	Free Software	Open Source Software	Shared Source Software
Era	1980	2000	2020
Triggers	Expensive, proprietary, non-free software	Protective, non-business friendly, viral licenses	Inability to efficiently monetize software by the creators
Enablers	Growing access to personal computers, CDs, email	Companies understand the business value of OSS; Internet, ASF, Github	Desire to consume software as a service; the cloud, blockchain, social media
Developers	Independent hackers	Small software companies	SaaS companies; Modern-day hackers
Governance	Individuals, informal groups	Software foundations, company consortiums	Independent companies, individuals, decentralized organizations
Monetization	Exception to license, support, distribution, documentation	Open core, enterprise-support, consulting and training, custom development	SaaS, dual licensing, sponsorship of individuals for perks, blockchain primitives, creators, indies...
Example licenses	Protective licenses: GPL, MPL, CC-BY-SA	Permissive licenses: MIT, Apache	Shared source/source available licenses: SSPL
Example projects	GNU, MySQL	Apache httpd, Kafka, Hadoop, Kubernetes	MongoDB, CockroachDB, Redis, ElasticSearch, Kibana, ksqlDB



CodeMotion Infographic

Flickr Fidelman Infographic

Where Did Open Source Come From?



FLOSS Software

FLOSS is an acronym for *Free*, *Libre*,
and *Open Source Software*.

FLOSS Software

'The acronym **FLOSS** is sometimes used to bridge the communities and their differing opinions. The word **libre** is added to **free** to make the goal of "free as in freedom", the ideals of liberty, more clear.'

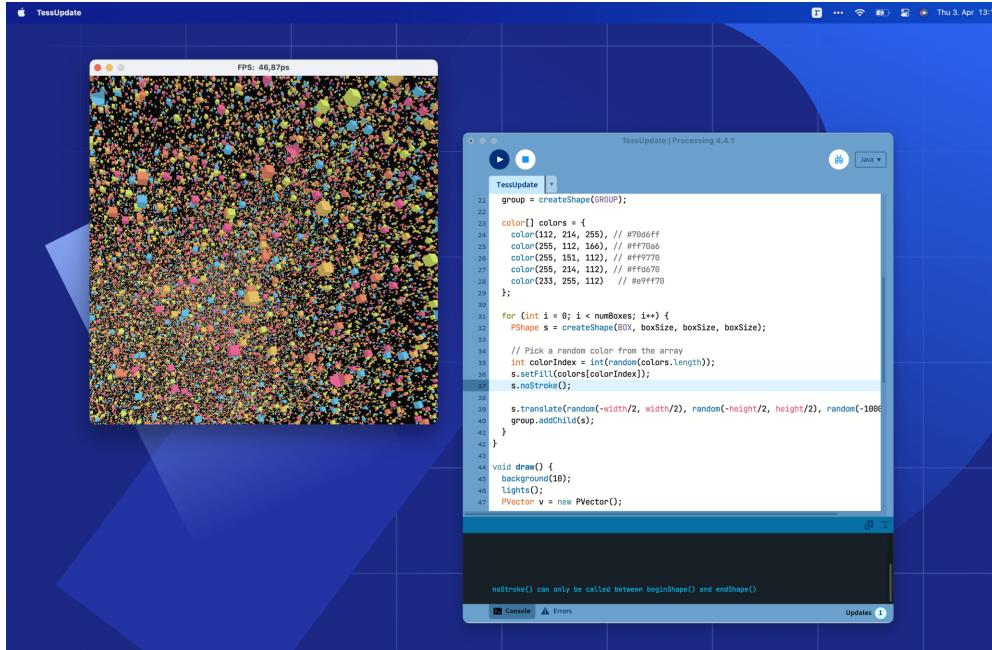
[Processing and FLOSS Medium Article by Casey Reas](#)

The Processing Ecosystem

Processing, p5.js, and the p5.js Editor are constituents of the Processing Foundation ecosystem.

How did they become open-source projects?

Processing



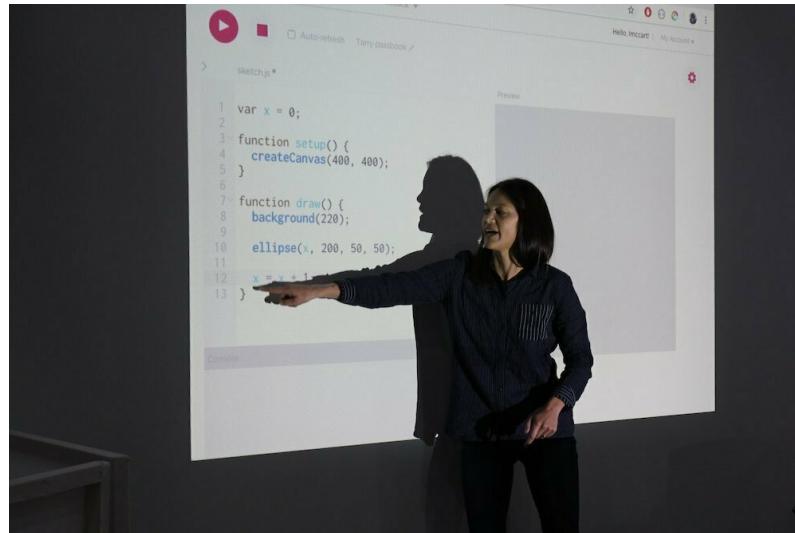
Processing is a flexible software sketchbook and a language for learning how to code.

History of Processing

”They [Ben Fry and Casey Reas] wondered:
How could they make programming more accessible
to designers and artists? And what would it look like
for code to become both a creative medium and
part of the creative process itself? ”

AIGA - Processing: The Software that Shaped Creative Coding

p5.js



p5.js is a JavaScript library for creative coding with a focus on making coding accessible and inclusive.

p5.js

"p5 really started during a conversation between Casey, Ben, Dan and me where they asked: "**What would Processing look like if it were reinvented today?**"

And so the first thought we had was, well, it would live on the web again, and it would run in all the browsers really easily. **What does access mean to us at this point, and how can we evolve that idea?**"

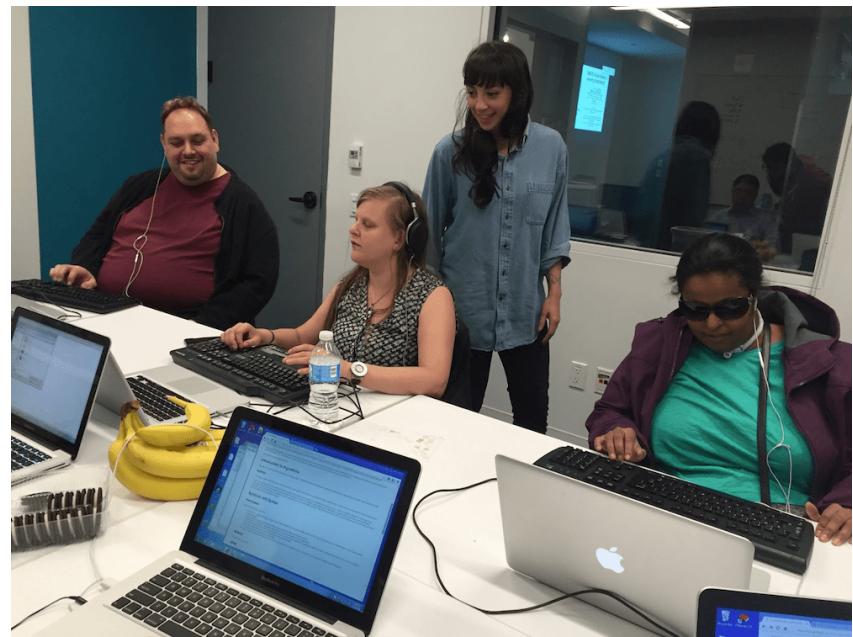
p5.js

One of the things I felt early on with p5 is that it wasn't just about having a diverse community of users; it was really about asking who's making the tool, who's contributing to it, because any tool is going to be embedded with the biases and the perspectives of the people making it.

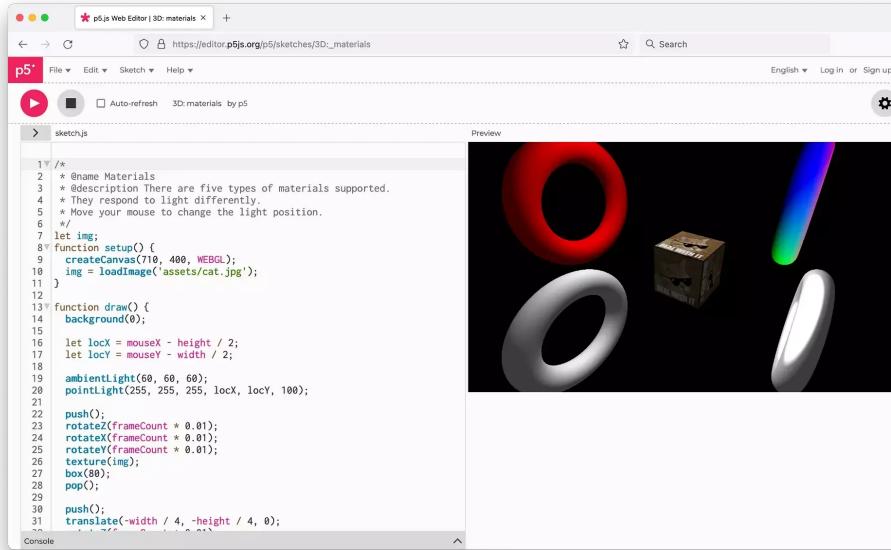


p5.js

Some of the things we did really intentionally were saying, okay, let's expand what it means to contribute to a tool. It's not just writing core code, it could be making graphics, it could be doing outreach, it could be organizing, it could be teaching—these are all building this tool together.



p5.js Editor



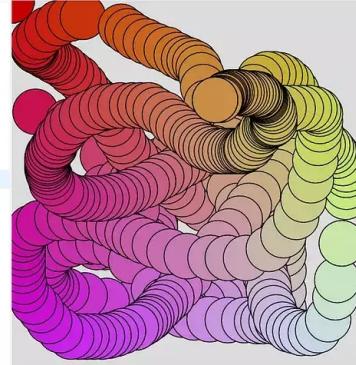
p5.js Editor is a website for creating p5.js sketches, with a focus on making coding accessible and inclusive for artists, designers, educators, beginners, any anyone else!

p5.js Editor

New Save Open

p5.js ellipse drawer

```
1 function setup() {
2   createCanvas(400, 400);
3   background(220);
4 }
5
6 function draw() {
7   var xColor = map(mouseX, 0, 400, 0, 255);
8   var yColor = map(mouseY, 0, 400, 0, 255);
9   fill(200, xColor, yColor);
10  ellipse(mouseX, mouseY, 50, 50);
11 }
```



A p5.js Editor for All by Cassie Tarakajian

p5.js Editor

I think having a voice in the tools that are being built is important. If you step back and think about what the point of technology is—it's to help us, right? And if the people designing the technology don't know who you are, they're probably not going to be able to help you. This was part of the foundation of Processing. What are tools that you can use to do art with computers?

Contributors Over the Years

- Processing Contributions Repository
- p5.js Github Repository
- PF Fellowships

Questions?

What's in an Open Source Project?

- Platform
- LICENSE
- README
- Code of Conduct
- Documentation

Platform



Bitbucket

GitLab

SOURCEFORGE



AWS CodeCommit

License File

It specifies what people can and cannot do with your project, and answers questions such as:

- Can someone modify your code and distribute it as their own?
- Can they include your code as a part of their own proprietary project?

[p5.js Editor Repository on Github](#)

License File

processing / p5.js-web-editor Public

Sponsor Edit Pins Watch 58 Fork 590 Star 943

Code Issues 193 Pull requests 39 Actions Projects 5 Wiki Security 3 Insights Settings

develop p5.js-web-editor / LICENSE Go to file ...

 processing/p5.js-web-editor is licensed under the **GNU Lesser General Public License v2.1**

Primarily used for software libraries, the GNU LGPL requires that derived works be licensed under the same license, but works that only link to it do not fall under this restriction. There are two commonly used versions of the GNU LGPL.

Permissions	Limitations	Conditions
✓ Commercial use	✗ Liability	ⓘ License and copyright notice
✓ Modification	✗ Warranty	ⓘ Disclose source
✓ Distribution		ⓘ State changes
✓ Private use		ⓘ Same license (library)

This is not legal advice. [Learn more about repository licenses.](#)

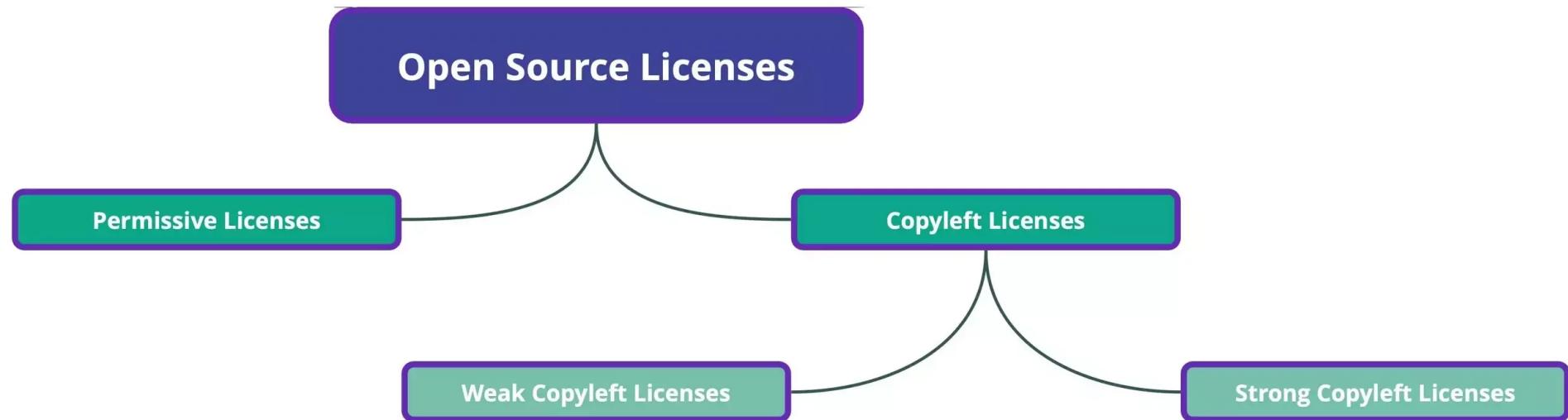
 catarak add license Latest commit 001abce on Oct 16, 2017 History

 1 contributor

458 lines (386 sloc) | 23.9 KB Raw Blame

```
1      GNU LESSER GENERAL PUBLIC LICENSE
2          Version 2.1, February 1999
3
4  Copyright (C) 1991, 1999 Free Software Foundation, Inc.
5  51 Franklin Street, Fifth Floor, Boston, MA  02110-1301 USA
6  Everyone is permitted to copy and distribute verbatim copies
7  of this license document, but changing it is not allowed.
8
9  (This is the first released version of the Lesser GPL. It also counts
```

License File



Copyleft Licenses

Copyleft licenses require that any modified version of an open source project also be released under the same license as the original project.

Copyleft Licenses - Strong

A strong copyleft license requires that any software that uses a project licensed under it must also be licensed in the same way.

If you add chocolate to your strawberry cake, if you serve or sell that cake to people, you have to give them recipe and allow them to modify and share it too.

Copyleft Licenses

Weak licenses have no requirements for software that only use the licensed project.

Still have to share changes to the original recipe if modified, but if you use the original recipe as an ingredient in a bigger cake, you don't have to share the whole new recipe, just the part you changed.

Permissive Licenses

Permissive licenses do not put restrictions on people modifying or redistributing a project.

You can take the strawberry cake recipe, add chocolate to it, and sell it as your own cake as long as you credit the original author somewhere.

README.md

package.json 2.4.2 last month

☰ README.md

p5.js Editor

Documentation is also available in the following languages:

[한국어](#)

Welcome! 🙌

The p5.js Editor is a website for creating p5.js sketches, with a focus on making coding accessible and inclusive for artists, designers, educators, beginners, and anyone else! You can create, share, or remix p5.js sketches without needing to download or configure anything. It is designed with beginners in mind, limiting features and frills. The editor is free and open-source because we believe software, and the tools to learn it, should be accessible to everyone.

Community

We are a community of, and in solidarity with, people from every gender identity and expression, sexual orientation, race, ethnicity, language, neuro-type, size, ability, class, religion, culture, subculture, political opinion, age, skill level, occupation, and background. We acknowledge that not everyone has the time, financial means, or capacity to actively participate, but we recognize and encourage involvement of all kinds. We facilitate and foster access and empowerment. We are all learners.

The p5.js Editor is a collaborative project created by many individuals, mostly volunteers, and you are invited to help. All types of involvement are welcome. See the [community section](#) to get started! You can also check out the [contributor docs](#) for more in-depth details about contributing to different areas of the project, including code, bug fixes, documentation, discussion, and more.

Languages

A horizontal bar chart titled "Languages" showing the percentage of code in various languages. The chart is mostly yellow, with small segments of other colors. The data is summarized in the following table:

Language	Percentage
JavaScript	82.1%
CSS	7.7%
HCL	0.2%
SCSS	9.6%
Shell	0.3%
Dockerfile	0.1%

README.md

The **README.md** file is the standard documentation file for open source projects.

It generally contains: a title, description, list of features, instructions on how to use a project, ancillary technologies, and collaborators.

[p5.js Editor Repository on Github](#)

Code of Conduct

A **Code of Conduct** is a written set of rules and standards for those who interact with a project.

Code of Conduct

processing / p5.js-web-editor Public

Sponsor Edit Pins Watch 58 Fork 590 Star 943

Code Issues 193 Pull requests 39 Actions Projects 5 Wiki Security 3 Insights Settings

develop p5.js-web-editor / .github / CODE_OF_CONDUCT.md Go to file ...

catarek Update CoC to match p5.js repo, add CoC to Policy documents ✓ Latest commit 0fc8465 on Sep 13, 2021 History

2 contributors

51 lines (37 sloc) 3.72 KB

[p5.js community statement](#)

p5.js is a community interested in exploring the creation of art and design with technology.

We are a community of, and in solidarity with, people from every gender identity and expression, sexual orientation, race, ethnicity, language, neuro-type, size, disability, class, religion, culture, subculture, political opinion, age, skill level, occupation, and background. We acknowledge that not everyone has the time, financial means, or capacity to actively participate, but we recognize and encourage involvement of all kinds. We facilitate and foster access and empowerment. We are all learners.

We like these hashtags: #noCodeSnobs (because we value community over efficiency), #newKidLove (because we all started somewhere), #unassumeCore (because we don't assume knowledge), and #BlackLivesMatter (because of course).

In practice:

- We are not code snobs. We do not assume knowledge or imply there are things that somebody should know.
- We insist on actively engaging with requests for feedback regardless of their complexity.

p5.js Editor Repository on Github

Documentation

Documentation for a project entails more in-depth information on how to use or contribute to it, and are mostly written in Markdown.

For example, documentation can cover:

- How to setup a local environment
- Diagrams of the project's infrastructures
- Guidelines for providing translations

Documentation

Clear, detailed, and up-to-date documentation can make it easy for people to use and contribute to an open source project!

[Klogg Documentation](#)

Documentation

processing / p5.js-web-editor Public

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<> Code Issues 193 Pull requests 39 Actions Projects 5 Wiki Security 3 Insights Settings

develop p5.js-web-editor / contributor_docs / Go to file Add file ...

stalgiag Update links to design principles and issue labels in contributor_doc... 2 weeks ago History

..

README.md	Update links to design principles and issue labels in contributor_doc...	2 weeks ago
accessibility.md	Update README to match p5.js, change developer_docs to contributor_docs	last year
deployment.md	Update README to match p5.js, change developer_docs to contributor_docs	last year
development.md	Update README to match p5.js, change developer_docs to contributor_docs	last year
installation.md development.md	update manual and docker installation documentation	3 months ago
preparing_a_pull_request.md	Update README to match p5.js, change developer_docs to contributor_docs	last year
public_api.md	Update README to match p5.js, change developer_docs to contributor_docs	last year
public_api_proposed.md	Update README to match p5.js, change developer_docs to contributor_docs	last year
release.md	Update release documentation with GitHub generated release notes	3 months ago
testing.md	Update README to match p5.js, change developer_docs to contributor_docs	last year
translations.md	Update README to match p5.js, change developer_docs to contributor_docs	last year

README.md

p5.js Editor Repository on Github

Contributing to a Project

- Forms of Contribution
- Creating an Issue
- Reviewing Contributions
- Writing a Pull Request
- Workflow for Contributing Code
- Rejection

Contributing to a Project

Use the [Github Glossary](#) to look up any terms you may not know!

Forms of Contribution

we have just added contributors to the [readme!](#) you all are 

If you have contributed to the project in some way and aren't listed, please add an entry for yourself by commenting with this template `@all-contributors please add @YourGitHubHandle for ___` ('___' can be any of the items listed below, like 'code', 'bug', 'doc'). If you have trouble with this, you can comment below and we will make sure to add your name.

blog: 
bug: 
code: 
design: 
doc: 
eventOrganizing: 
example: 
financial: 
fundingFinding: 
ideas: 
infra: 
plugin: 
question: 
review: 
talk: 
test: 
tool: 
translation: 
tutorial: 
video: 

The README.md file will get updated based on the `.allcontributors-src` file each time `all-contributors generate` is run.



All Contributors Specification

Creating an Issue

A good issue should be as descriptive as possible.

Include information like:

- Version Number
- Browser
- Expected vs. Real Behavior
- Steps to Reproduce
- Supplementary Media (images, videos, links)

[Recent Example Issue on p5.js Editor](#)

Reviewing Contributions

You can review contributions by "triaging issues", or adding labels and deleting duplicates.

An important label to add is a "Good First Issue", which indicates issues that newcomers could easily work on.

[p5.js Editor Repository on Github](#)

Reviewing Contributions

Code Issues 193 Pull requests 39 Actions Projects 5 Wiki Security 3 Insights Settings

Cancel Authentication with Github error "Internal Server Error" #2104

Edit

New issue

Open davidbmx opened this issue yesterday · 1 comment



davidbmx commented yesterday

Contributor



...

Details about the bug:

- Web browser and version: Safari Version 16.2
- Operating System: Mac OS 13.1
- Steps to reproduce this:
 1. Try to sign in with Github
 2. In Authorize page click in Cancel button that redirect to https://editor.p5js.org/auth/github/callback?error=access_denied&error_description=The+user+has+denied+your+application+access.&error_uri=https%3A%2F%2Fdocs.github.com%2Fapps%2Fmanaging-oauth-apps%2Ftroubleshooting-authorization-request-errors%2F%23access-denied

Internal Server Error

Assignees

No one—assign yourself



Labels

Apply labels to this issue

Filter labels

- duplicate
- good first issue
- good medium issue
- help wanted
- i18n
- needs steps to reproduce
- priority:critical
- priority:high
- priority:low



Reviewing Contributions

[Open](#) Cancel Authentication with Github error "Internal Server Error" #2104
davidbmx opened this issue yesterday · 1 comment

davidbmx added the [bug](#) label yesterday

welcome (bot) commented yesterday

Welcome! 🚀 Thanks for opening your first issue here! And to ensure the community is able to respond to your issue, be sure to follow the issue template if you haven't already.

Write Preview

Leave a comment

Attach files by dragging & dropping, selecting or pasting them.

[Close issue](#) [Comment](#)

Development [Create a branch](#) for this issue or link a pull request.

Notifications [Subscribe](#) Customize

You're not receiving notifications from this thread.

1 participant 

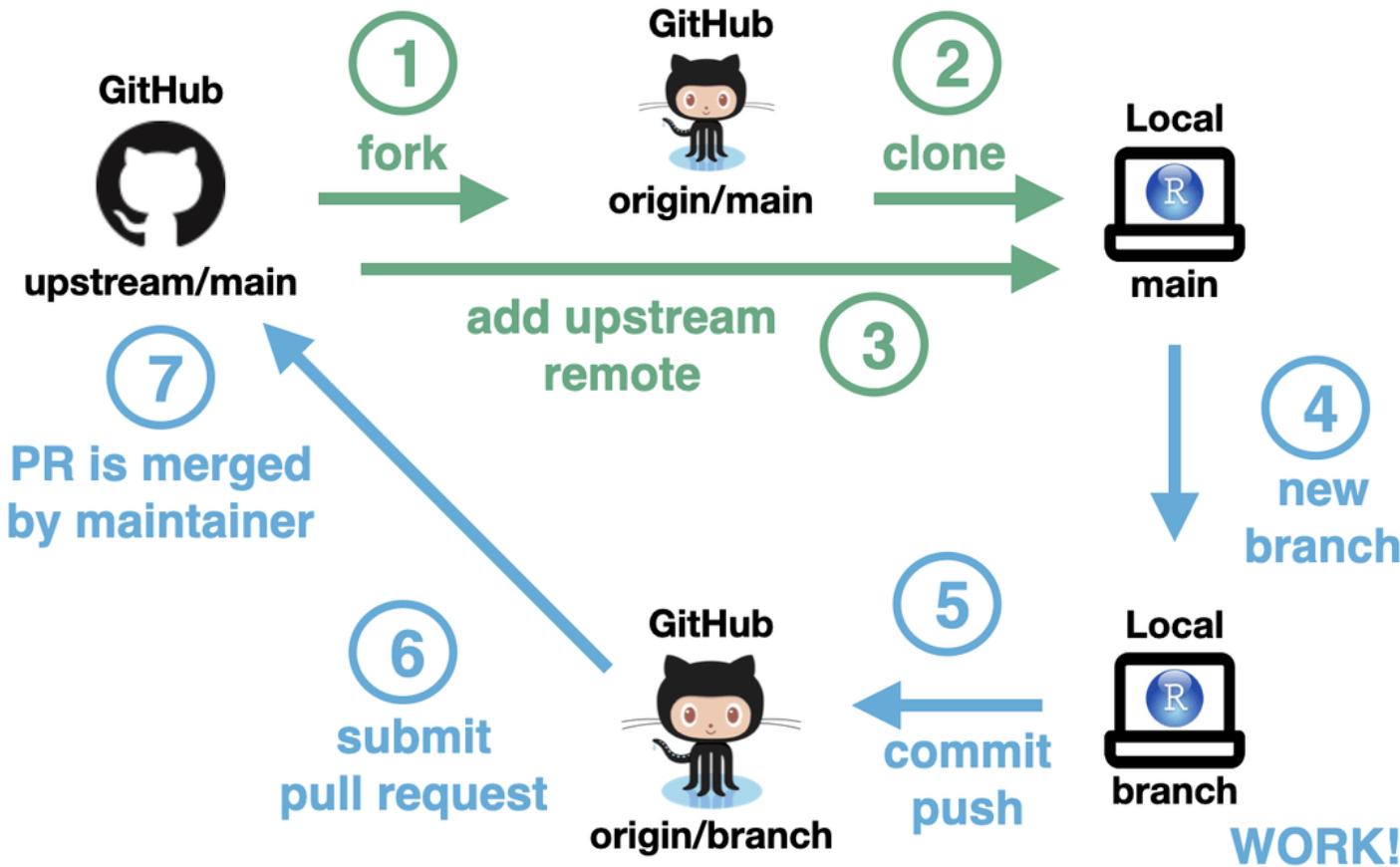
[Lock conversation](#) [Pin issue](#) [Transfer issue](#) [Delete issue](#)

Writing a Pull Request

Pull Requests are a feature that allows a repository's collaborators to review and give feedback on proposed code changes before they are accepted and merged into another branch.

[p5.js Editor Repository on Github](#)

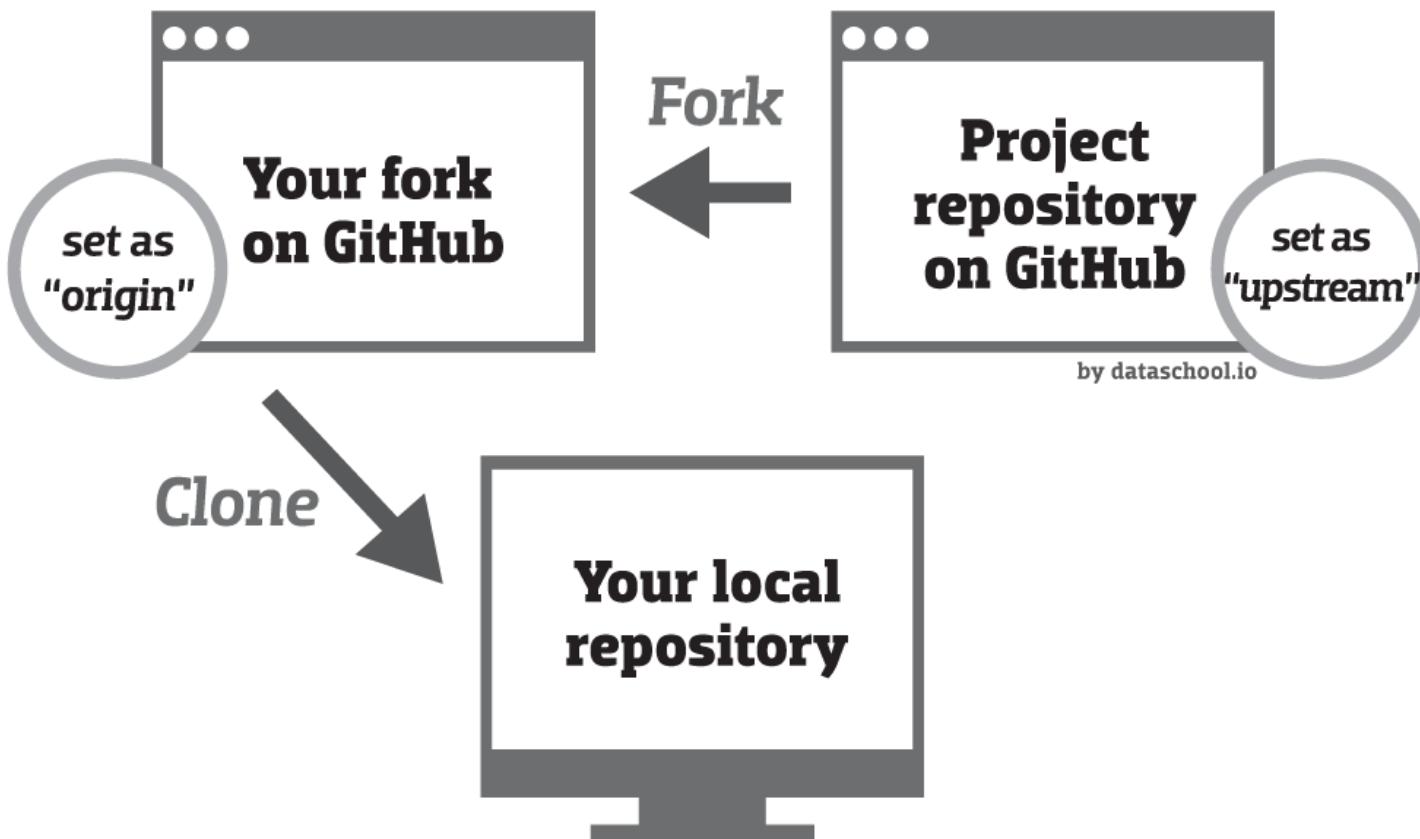
Workflow for Contributing Code



Workflow for Contributing Code

- Browsing through issues on Github to find an issue or open an issue.
- Forking the Repository.
- Creating a local copy of your forked project. For today's workshop, you can use Github Desktop for this!
- Planning any relevant material.
- Adding your changes using a Text Editor (i.e. VS Code, Brackets, Sublime).
- Committing and pushing the changes to your forked repository.
- Creating a pull request to the original repository.
- Revising your pull request based on feedback.

Workflow for Contributing Code



Receiving Rejection

Rejection is a natural part of the open source experience.
No matter how hard we work on a contribution, the
maintainers of the project may still reject it.

Getting Paid for Open Source Work

A lot of open source work is voluntary!

Ashe Dryden in "The Ethics of Unpaid Labor and the OSS Community"

Questions?

Let's Try it Out!

Setting Up Your Environment

- Setup a Github Account
- Follow the [Installation Docs](#)

Community Management

- What information should be communicated to new contributors? What improvements could be made to public messaging?
- How to handle [Github Discussions](#) or the [Wiki](#)? Better areas for discussion?
- Mock Responses to Different Types of Scenarios
- Create New Issue Documentation
- How to Handle [Translations](#)?

Code/Design Contribution

- Open an Issue for Missing Translations for [About Page](#)
- Investigate improvements for File Management/Structure
- Creating a Pull Request for a [Good First Issue](#)
- Convert Components to use 'styled-components'
- Accessibility Testing
- Open New Issues for Styling Bug Fixes

Review

What surprised you about the contribution process?

What challenges did you face? What would've made it easier for you to contribute?

Did this activity change your perspective on what "open source contribution" means?

Add Yourself!

Instructions for Adding Yourself to the All-Contributors List

[Contributors List on the p5.js Library Repository](#)

Thanks!

Stay in touch!

[Feedback Form](#)

[p5.js Discord](#)

[PF Discourse](#)

rachel@processingfoundation.org