

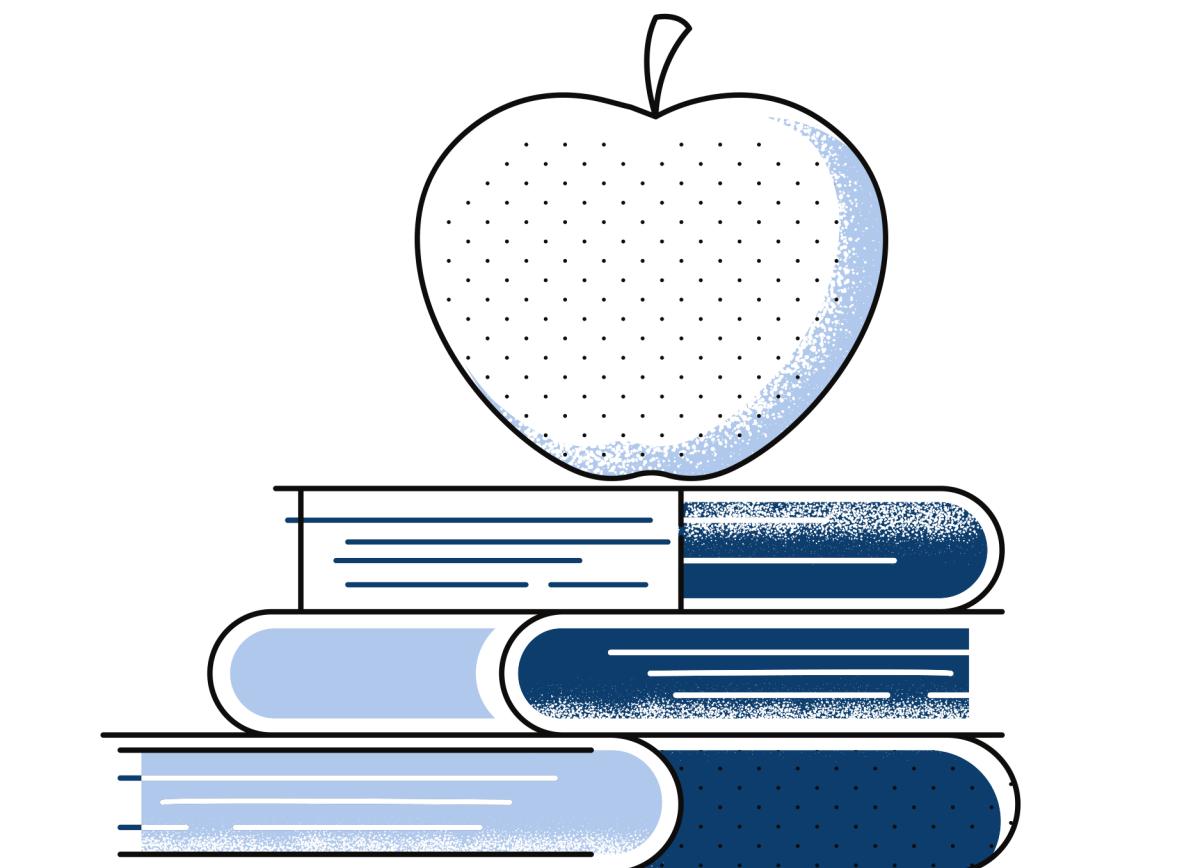


Intro to Open Source Contributions

Women Who Code Mobile

October 11, 2023

Agenda



- OSS Contribution Overview
- OSS Contribution Process
- Finding OSS Projects
- OSS Contribution Practice

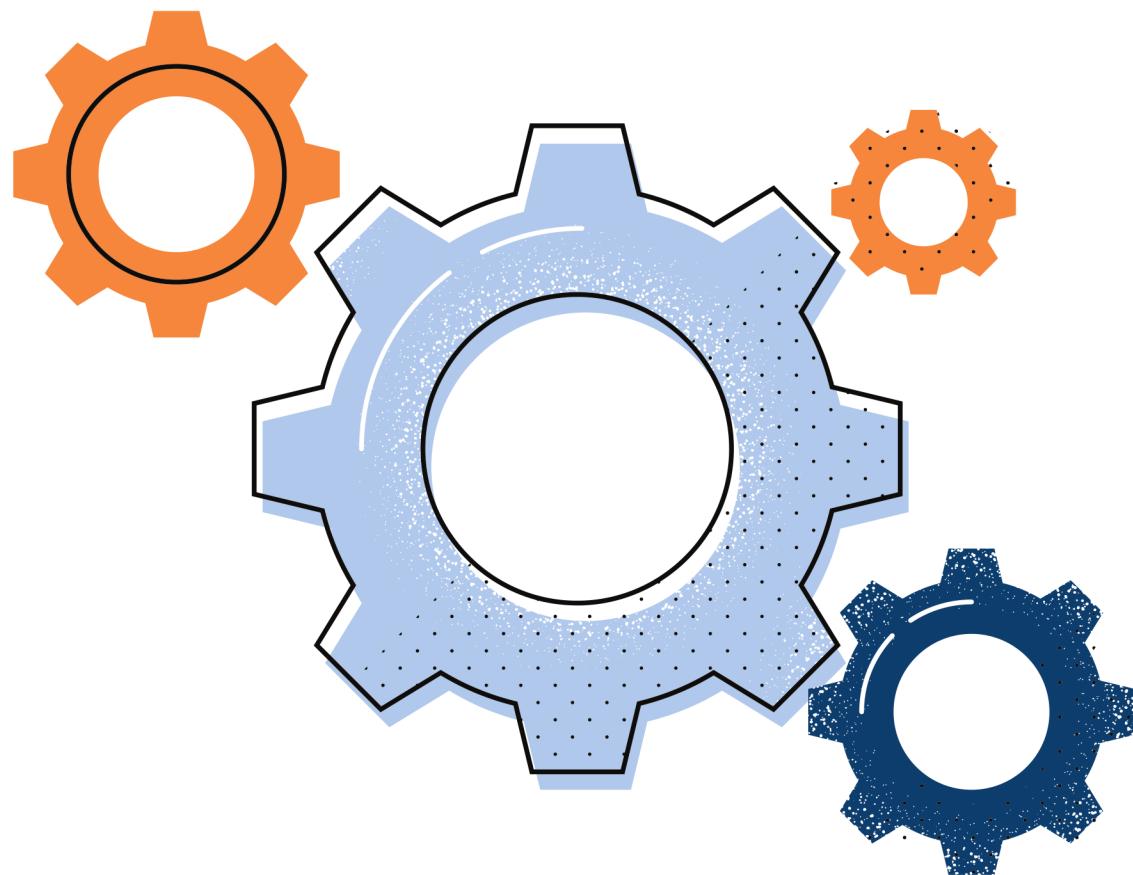


OSS Contribution Overview

What is OSS?

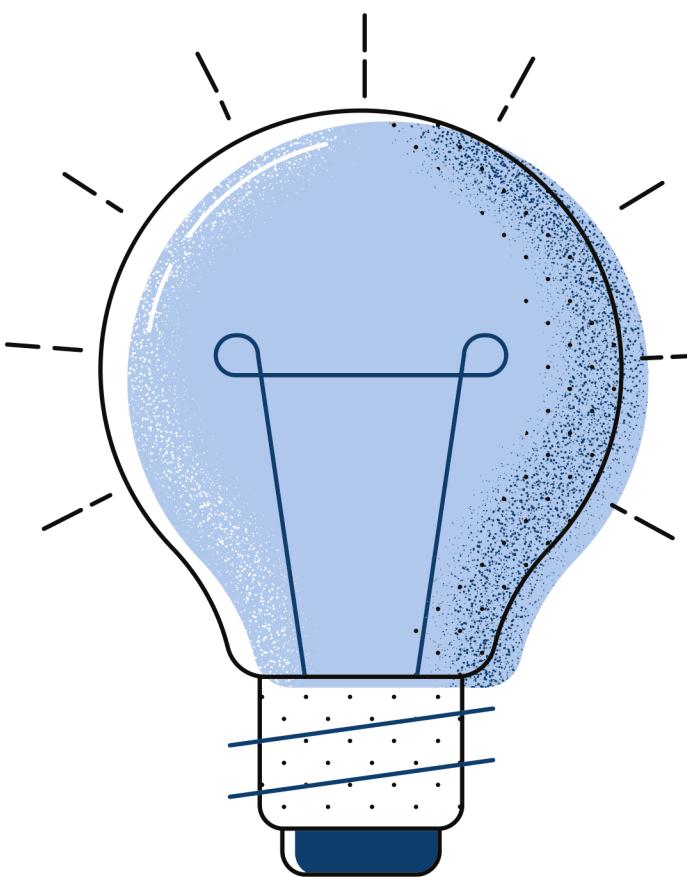
Open source code is freely available for anyone to use, modify, and distribute.

- Various OSS licenses and definitions exist
- May have one or many contributors
- Code typically distributed in public repository like GitHub
- Typically projects have a maintainer or core team responsible for managing contributions



Learn More: opensource.org/osd

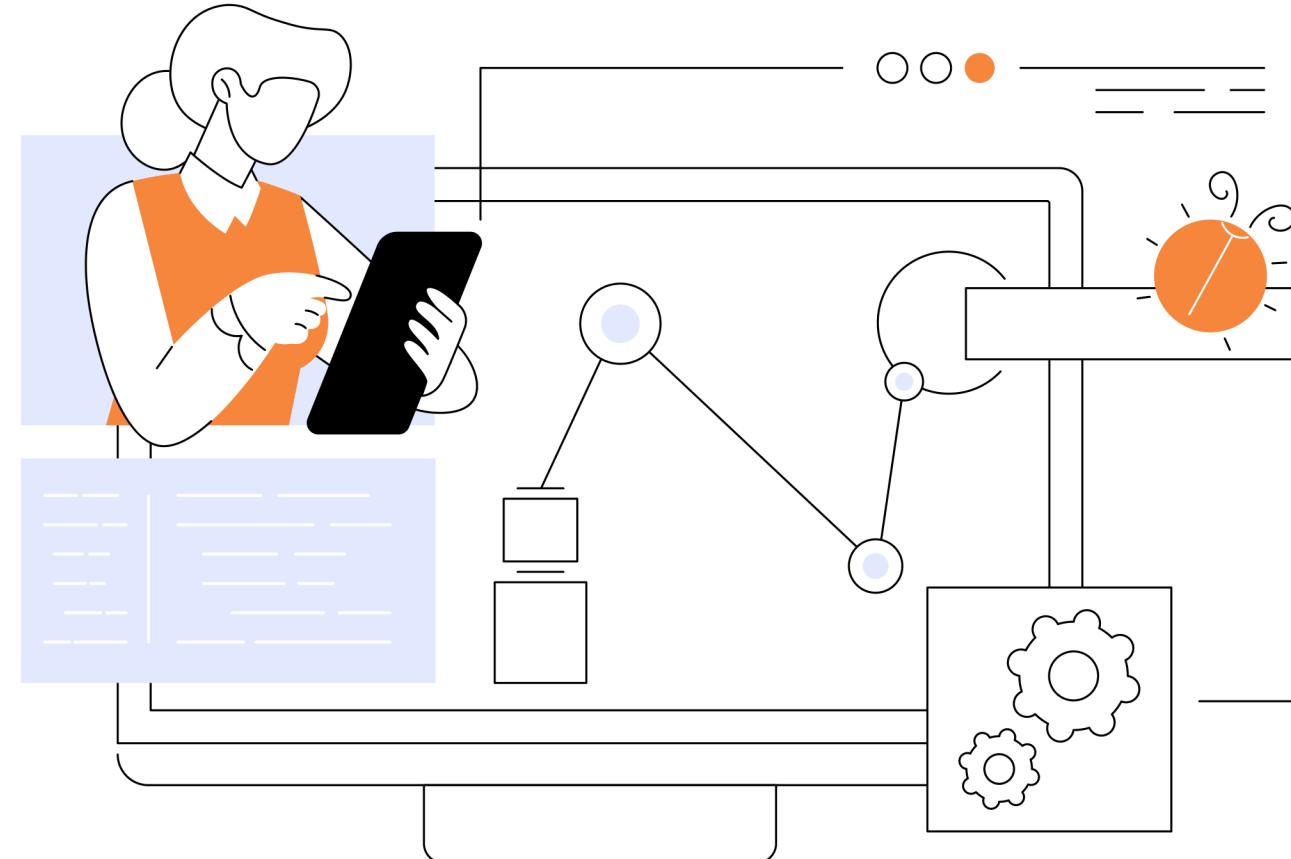
Benefits of Contributing



- Improve software you rely on
- Improve existing skills or learn new skills
- Meet developers in the community
- Find mentors and teach others
- Public documentation of your technical skills
- Learn software development processes and practices

Learn More: opensource.guide/how-to-contribute

Types of Contributions



- Open Issues
- New Features
- Design
- Documentation
- Test Coverage
- Bug Reports
- CI/CD
- Automation/Tooling
- Issue/PR Management

Hacktoberfest Contributions



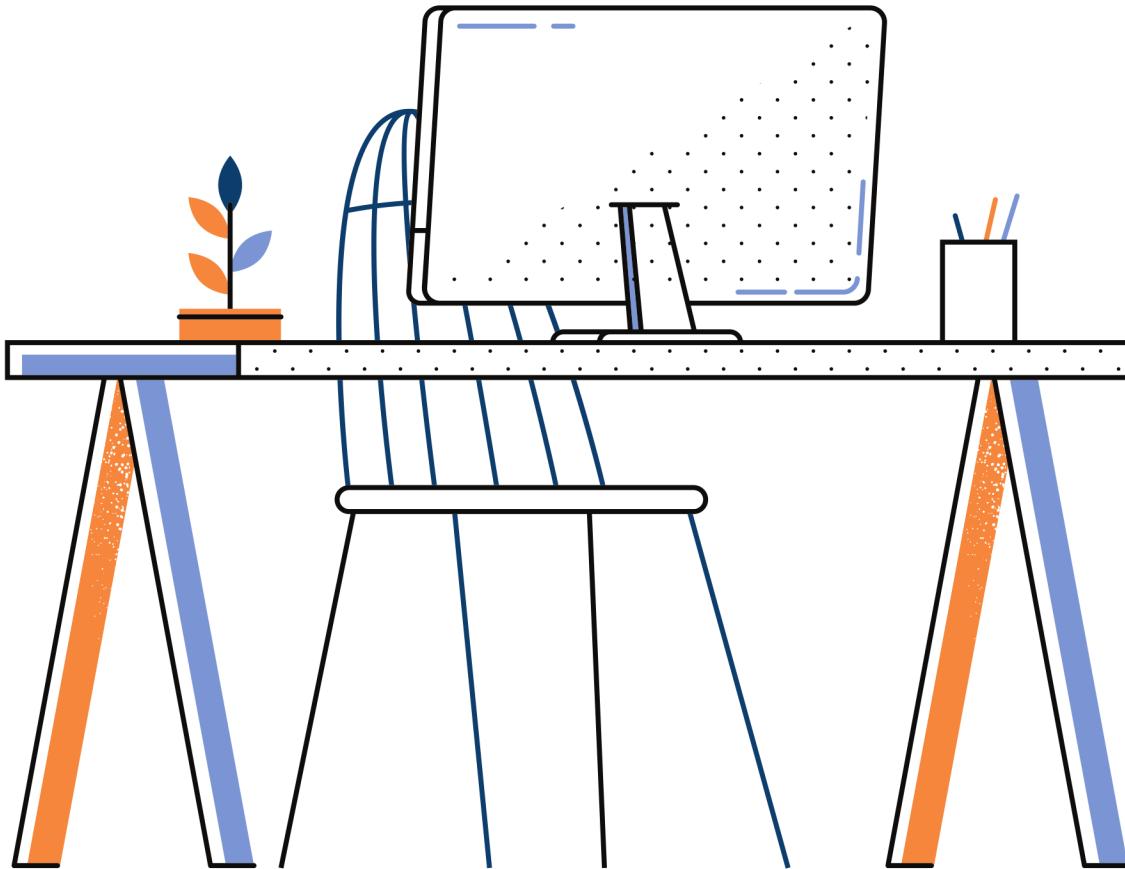
You can contribute to OSS any time, but to participate in Hacktoberfest, there are specific rules.

- Review website carefully: hacktoberfest.com
- Join Hacktoberfest Discord to ask questions
- Projects MUST be participating in Hacktoberfest with the `hacktoberfest` tag
- **Only submit quality contributions**
- Four PRs/MRs must be submitted and approved from Oct 1-31 (any time zone)



OSS Contribution Process

Process



Prepare to Contribute

- Find project
- Review Contributing Guide
- Find & claim issue
- Fork repo (make remote copy)
- Clone repo (local copy of remote fork)

Create Contribution

- Create & checkout branch
- Save, stage, and commit changes
- Push changes to remote fork branch

Submit Contribution

- Create a pull request to original repo
- Code review, if needed
- Maintainer merges pull request

Prepare to Contribute

Find & claim issue

Add OSS Project to list #1

Open

ceceliacreates opened this issue last week · 1 comment



ceceliacreates commented last week

Owner

...

- Go to `projects.md` file in the root of the project
- Add your answer to the bottom of the list per the instructions in the file



ceceliacreates added the `good first issue` label last week



ceceliacreates commented now

Owner

Author

...

I can work on this one!



Prepare to Contribute

Fork repo

The screenshot shows a GitHub repository page for 'oss-projects-wwc'. The repository is public and has 1 issue, 1 pull request, and 0 forks. The 'Code' tab is selected. The 'Fork' button in the top right corner is highlighted with a red box. A tooltip above the button says 'Fork your own copy of devanshimodha/oss-projects-wwc'. The repository has 1 branch and 0 tags. The commit history shows two commits from 'devanshimodha' yesterday, renaming 'Projects' to 'Projects.md' and updating 'README.md'. The repository description is empty. On the right side, there's a sidebar with options like 'Readme', 'Activity', '0 stars', '1 watching', '0 forks', 'Report repository', 'Releases' (no releases), and 'Packages'.

devanshimodha / oss-projects-wwc

Type / to search

Code Issues 1 Pull requests Actions Projects Security Insights

oss-projects-wwc Public

Watch 1 Fork 0 Star 0

Fork your own copy of devanshimodha/oss-projects-wwc

main 1 branch 0 tags

Go to file Add file ▾ Code About

devanshimodha Rename Projects to Projects.md dc3e28b yesterday 4 commits

Projects.md Rename Projects to Projects.md yesterday

README.md Update README.md last week

README.md

Intro to Open Source Contributions ↗

Repository to accompany the Women Who Code Mobile Intro to Open Source Contributions Workshop on Oct 11, 2023.

No description, website, or topics provided.

Readme Activity 0 stars 1 watching 0 forks Report repository

Releases

No releases published

Packages

Prepare to Contribute

Fork repo

Create a new fork

A *fork* is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project.

Required fields are marked with an asterisk ().*

Owner *



ceceliacreates

Repository name *

oss-projects-wwc

oss-projects-wwc is available.

By default, forks are named the same as their upstream repository. You can customize the name to distinguish it further.

Description (optional)

Copy the `main` branch only

Contribute back to devanshimodha/oss-projects-wwc by adding your own branch. [Learn more](#).

You are creating a fork in your personal account.

[Create fork](#)

Prepare to Contribute

Clone repo

The screenshot shows a GitHub repository page for `oss-projects-wwc`. The repository is public and was forked from `devanshimodha/oss-projects-wwc`. It has 1 branch and 0 tags. The main branch is up to date with the upstream main branch. The repository contains files like `Projects.md`, `README.md`, and `RenamedProjects.md`. On the right, there's a cloning interface with tabs for Local, Codespaces, and GitHub CLI. The GitHub CLI tab is selected, showing the command `gh repo clone ceceliacreates/oss-projects`. A red box highlights the "Code" button in the top right corner of the cloning interface.

oss-projects-wwc Public

forked from [devanshimodha/oss-projects-wwc](#)

main 1 branch 0 tags

This branch is up to date with devanshimodha/oss-projects-wwc:main.

devanshimodha Rename Projects to Projects.md

Projects.md Rename Projects to Projects.r

README.md Update README.md

README.md

Go to file Add file ▾ <> Code ▾

Local Codespaces

Clone

HTTPS SSH GitHub CLI

gh repo clone ceceliacreates/oss-projects

Work fast with our official CLI. [Learn more about the CLI.](#)

Open with GitHub Desktop

Download ZIP

Intro to Open Source Contribution

Prepare to Contribute

Clone repo (options)

Clone with HTTPS

- Example: `git clone https://github.com/yourusername/oss-projects-wwc.git`
- Authenticate with GitHub username and personal access token
- [GitHub Docs on HTTPS cloning](#)

Clone with SSH

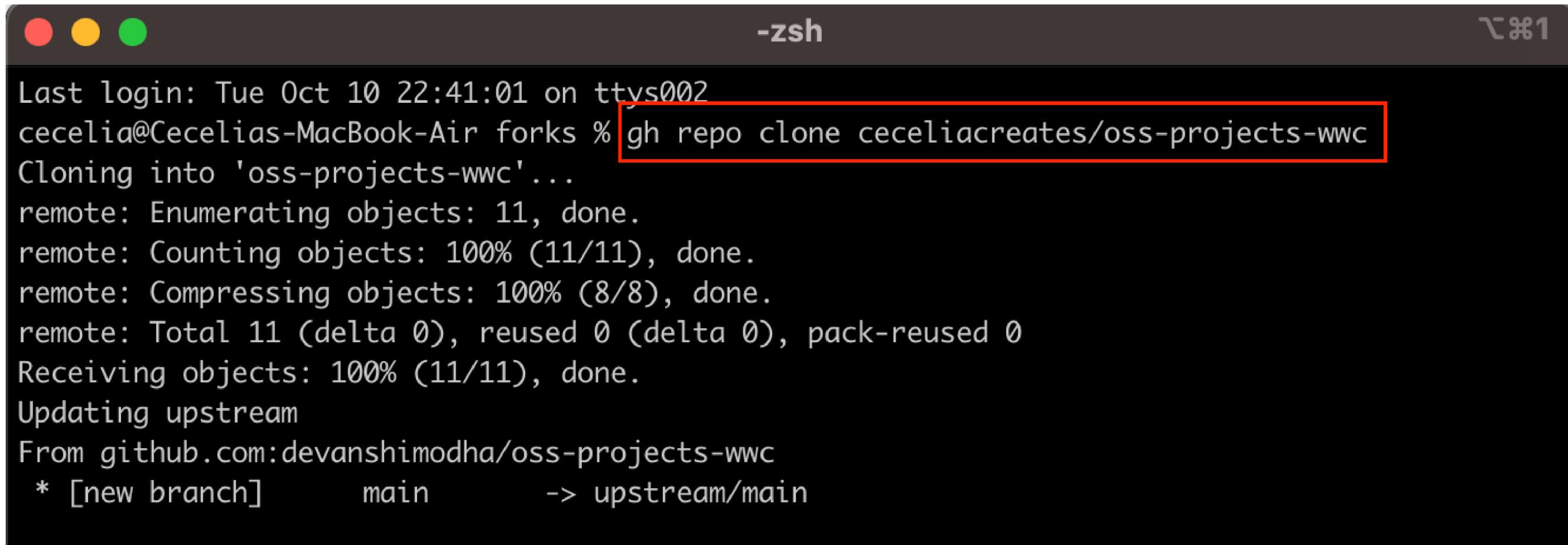
- Example: `git clone git@github.com:yourusername/oss-projects-wwc.git`
- Authenticate with SSH key passphrase
- [GitHub Docs on SSH cloning](#)

Clone with GitHub CLI

- Example: `gh repo clone ceceliacreates/oss-projects-wwc`
- Pre-authenticate with `gh auth login`
- [GitHub CLI Docs](#)

Prepare to Contribute

Clone repo

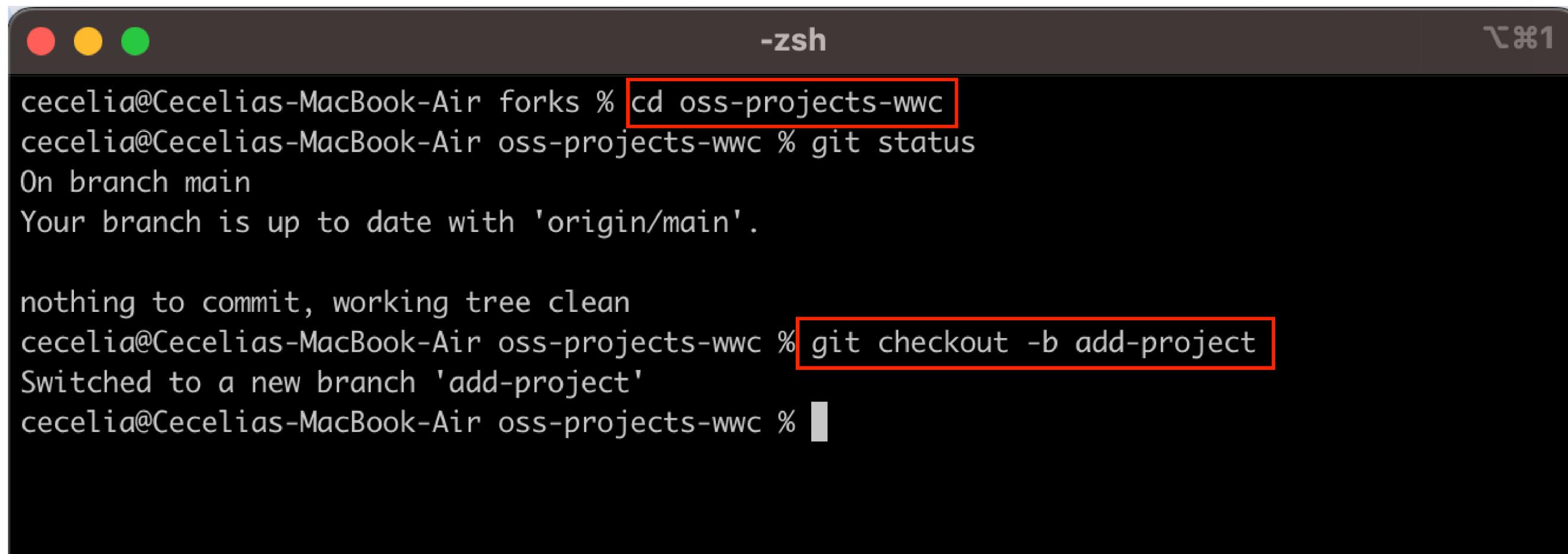


A terminal window titled '-zsh' showing the command to clone a GitHub repository. The command 'gh repo clone ceceliacreates/oss-projects-wwc' is highlighted with a red box.

```
Last login: Tue Oct 10 22:41:01 on ttys002
cecelia@Cecelias-MacBook-Air forks % gh repo clone ceceliacreates/oss-projects-wwc
Cloning into 'oss-projects-wwc'...
remote: Enumerating objects: 11, done.
remote: Counting objects: 100% (11/11), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 11 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (11/11), done.
Updating upstream
From github.com:devanshimodha/oss-projects-wwc
 * [new branch]      main      -> upstream/main
```

Create Contribution

Create & checkout branch

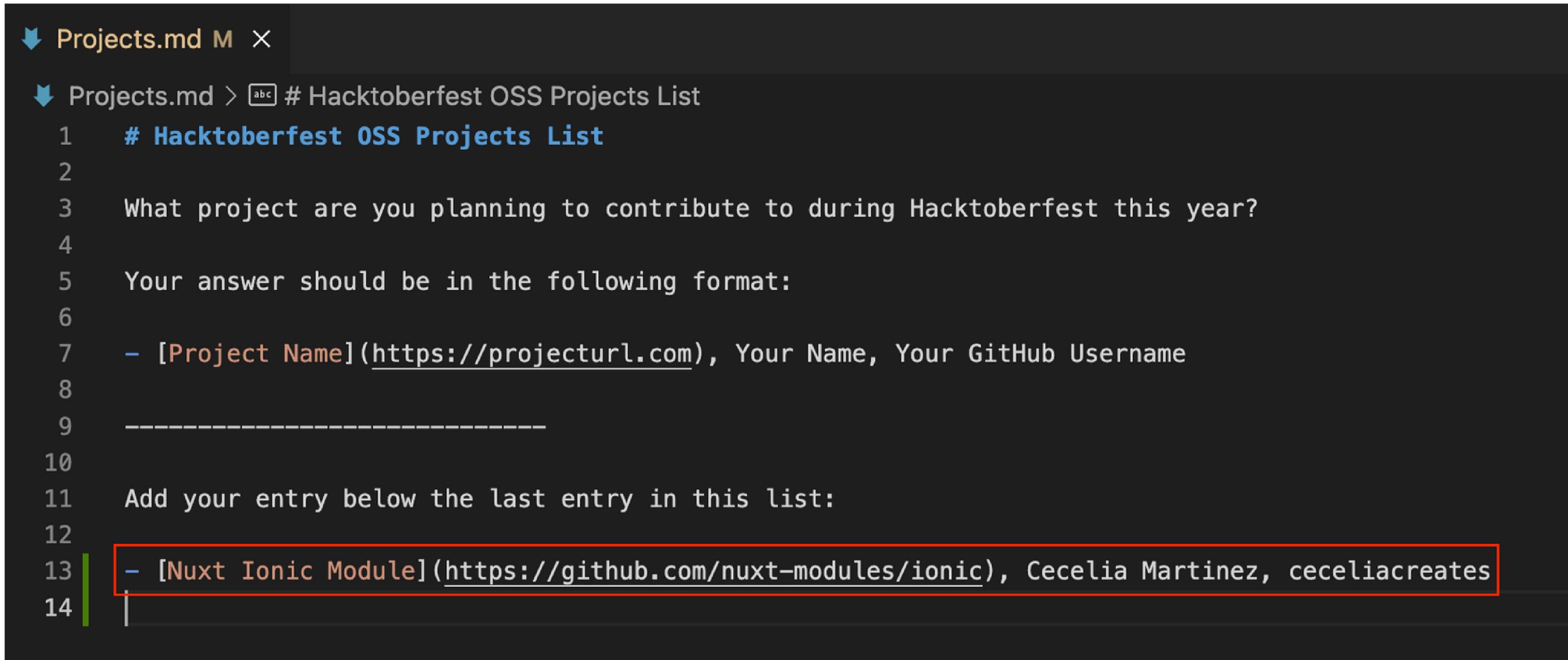


```
-zsh
cecilia@Cecelias-MacBook-Air forks % cd oss-projects-wwc
cecilia@Cecelias-MacBook-Air oss-projects-wwc % git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
cecilia@Cecelias-MacBook-Air oss-projects-wwc % git checkout -b add-project
Switched to a new branch 'add-project'
cecilia@Cecelias-MacBook-Air oss-projects-wwc %
```

Create Contribution

Save, stage, and commit changes



The screenshot shows a terminal window with a dark background and white text. It displays a GitHub commit message for a file named 'Projects.md'. The message starts with a header '# Hacktoberfest OSS Projects List' and includes instructions for contributing projects. At the bottom, there is a line starting with '- [Nuxt Ionic Module]'. This line is highlighted with a red rectangular box, indicating it is the user's contribution.

```
Projects.md M X
Projects.md > abc # Hacktoberfest OSS Projects List
1 # Hacktoberfest OSS Projects List
2
3 What project are you planning to contribute to during Hacktoberfest this year?
4
5 Your answer should be in the following format:
6
7 - [Project Name](https://projecturl.com), Your Name, Your GitHub Username
8
9 -----
10
11 Add your entry below the last entry in this list:
12
13 - [Nuxt Ionic Module](https://github.com/nuxt-modules/ionic), Cecelia Martinez, ceceliacreates
14
```

Create Contribution

Save, stage, and commit changes

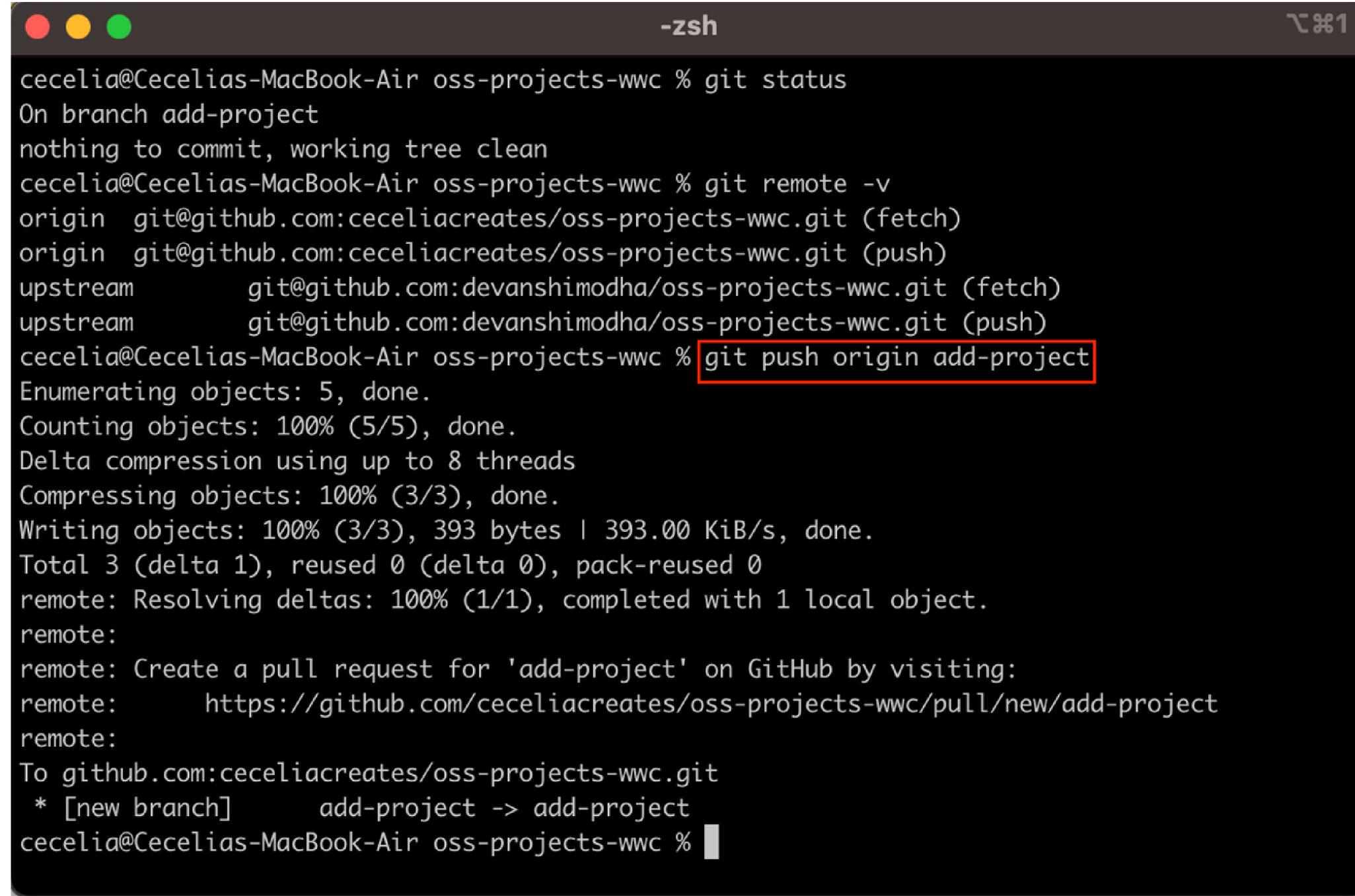
```
-zsh
cecilia@Cecelias-MacBook-Air oss-projects-wwc % git status
On branch add-project
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   Projects.md

no changes added to commit (use "git add" and/or "git commit -a")
cecilia@Cecelias-MacBook-Air oss-projects-wwc % git add Projects.md
cecilia@Cecelias-MacBook-Air oss-projects-wwc % git status
On branch add-project
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   Projects.md

cecilia@Cecelias-MacBook-Air oss-projects-wwc % git commit -m "adds project to list"
[add-project 263f050] adds project to list
  1 file changed, 2 insertions(+)
cecilia@Cecelias-MacBook-Air oss-projects-wwc %
```

Create Contribution

Push changes to remote fork branch

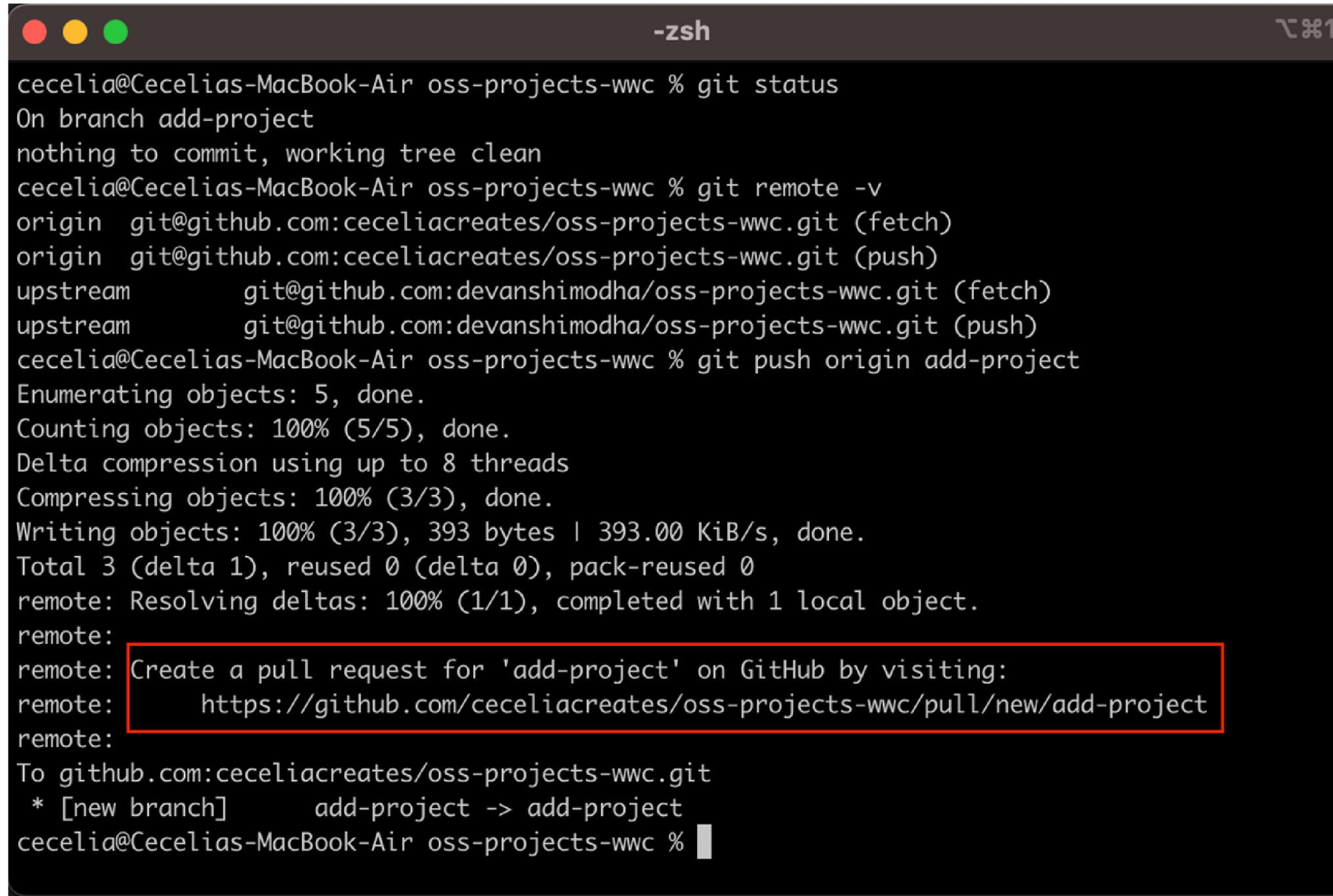
A screenshot of a macOS terminal window titled "-zsh". The window shows a user's command-line session for pushing changes to a GitHub repository. The session starts with 'git status' showing a clean working tree, followed by 'git remote -v' listing remotes for origin and upstream. The user then runs 'git push origin add-project', which is highlighted with a red rectangle. The output shows the progress of the push, including object enumeration, compression, and writing to the remote. It concludes with instructions to create a pull request on GitHub.

```
cecelia@Cecelias-MacBook-Air oss-projects-wwc % git status
On branch add-project
nothing to commit, working tree clean
cecelia@Cecelias-MacBook-Air oss-projects-wwc % git remote -v
origin  git@github.com:ceceliacreates/oss-projects-wwc.git (fetch)
origin  git@github.com:ceceliacreates/oss-projects-wwc.git (push)
upstream    git@github.com:devanshimodha/oss-projects-wwc.git (fetch)
upstream    git@github.com:devanshimodha/oss-projects-wwc.git (push)
cecelia@Cecelias-MacBook-Air oss-projects-wwc % git push origin add-project
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 393 bytes | 393.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'add-project' on GitHub by visiting:
remote:     https://github.com/ceceliacreates/oss-projects-wwc/pull/new/add-project
remote:
To github.com:ceceliacreates/oss-projects-wwc.git
 * [new branch]      add-project -> add-project
cecelia@Cecelias-MacBook-Air oss-projects-wwc %
```

Submit Contribution

Create pull request to original repo

Option 1



```
-zsh
cecelia@Cecelias-MacBook-Air oss-projects-wwc % git status
On branch add-project
nothing to commit, working tree clean
cecelia@Cecelias-MacBook-Air oss-projects-wwc % git remote -v
origin  git@github.com:ceceliacreates/oss-projects-wwc.git (fetch)
origin  git@github.com:ceceliacreates/oss-projects-wwc.git (push)
upstream    git@github.com:devanshimodha/oss-projects-wwc.git (fetch)
upstream    git@github.com:devanshimodha/oss-projects-wwc.git (push)
cecelia@Cecelias-MacBook-Air oss-projects-wwc % git push origin add-project
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 393 bytes | 393.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'add-project' on GitHub by visiting:
remote:     https://github.com/ceceliacreates/oss-projects-wwc/pull/new/add-project
remote:
To github.com:ceceliacreates/oss-projects-wwc.git
 * [new branch]      add-project -> add-project
cecelia@Cecelias-MacBook-Air oss-projects-wwc %
```

Submit Contribution

Create pull request to original repo

Option 2

The screenshot shows a GitHub repository page for 'oss-projects-wwc'. At the top, there's a profile picture of a woman, the repository name 'oss-projects-wwc', and a 'Public' button. Below the name, it says 'forked from devanshimodha/oss-projects-wwc'. On the right side, there are 'Pin' and 'Watch' buttons, with '0' notifications for both. A yellow banner at the bottom left contains the text 'add-project had recent pushes less than a minute ago' with a small icon of a person pushing a cart. A green button on the right of the banner says 'Compare & pull request'.

Submit Contribution

Create pull request to original repo

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

The screenshot shows the GitHub interface for creating a pull request. At the top, there are dropdown menus for 'Original repo' (base repository: devanshimodha/oss-projects..., base: main) and 'Your fork repo' (head repository: ceceliacreates/oss-projects-..., compare: add-project). A green checkmark indicates 'Able to merge'. Below this, a commit message 'adds project to list' is shown, along with 'Write' and 'Preview' buttons and rich text editing tools. The preview area contains the commit message: 'Adds new line with my selected project for Hacktoberfest, the Nuxt Ionic Module.' It also shows 'Resolves #' and a link to 'Helpful description and reference to GitHub Issue this PR resolves (can hit # to see options)'. At the bottom, there's a note to 'Attach files by dragging & dropping, selecting or pasting them.' A checkbox for 'Allow edits by maintainers' is checked. The 'Create pull request' button is highlighted with a red box.

Submit Contribution

Code review, if needed

Accept Edits

- Maintainers may make edits directly to your PR. You can accept these and commit them directly in the GitHub UI

Push New Commits

- Maintainers may offer feedback but not edit directly. You can push new commits to the **same branch** to make these changes without the need for a new PR

Live Walkthrough

Cecelia (Contributor) will walk through the following steps:

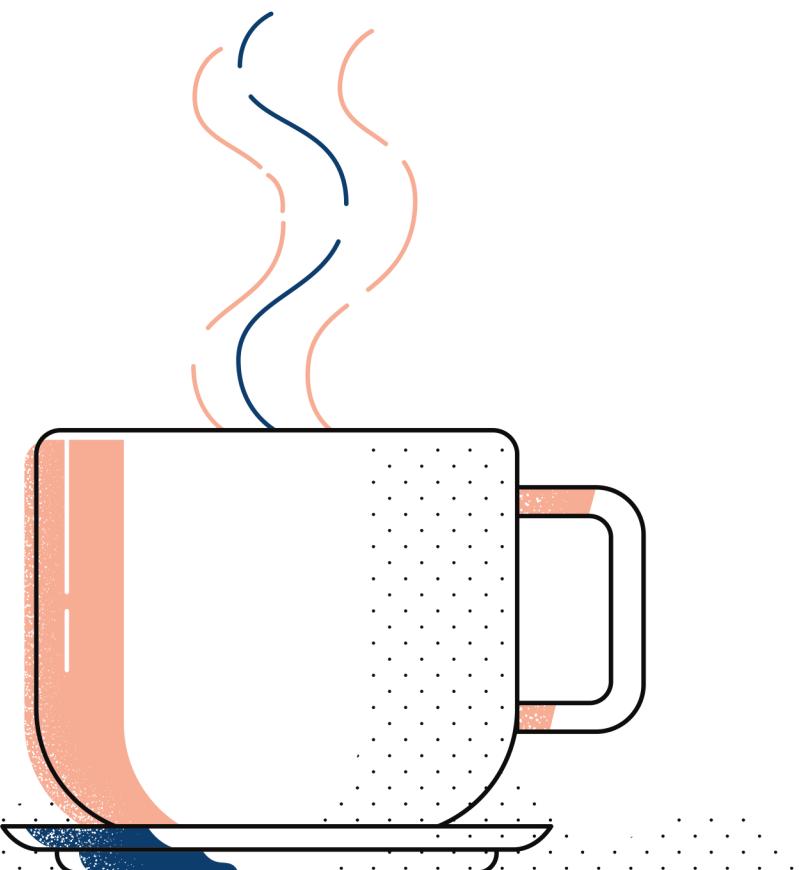
- Claim an Issue
- Fork & clone repo
- Commit & push changes
- Create a pull request





Finding OSS Projects

Finding Projects



Causes/Interests

- Demographic-based groups (ex. WWC)
- Civic meetups/hackathons (Code for America)
- Libraries/tools you already use
- Companies/orgs interested in professionally
- swiftpackageindex.com
- f-droid.org/en

OSS Sites

- github.com/topics/hacktoberfest
- hacktoberfest-projects.vercel.app/
- firstissue.dev
- up-for-grabs.net
- opensauced.pizza
- 24pullrequests.com
- www.codetriage.com
- www.writespeakcode.com
- www.linuxfoundation.org/projects
- github.com/EddieHubCommunity

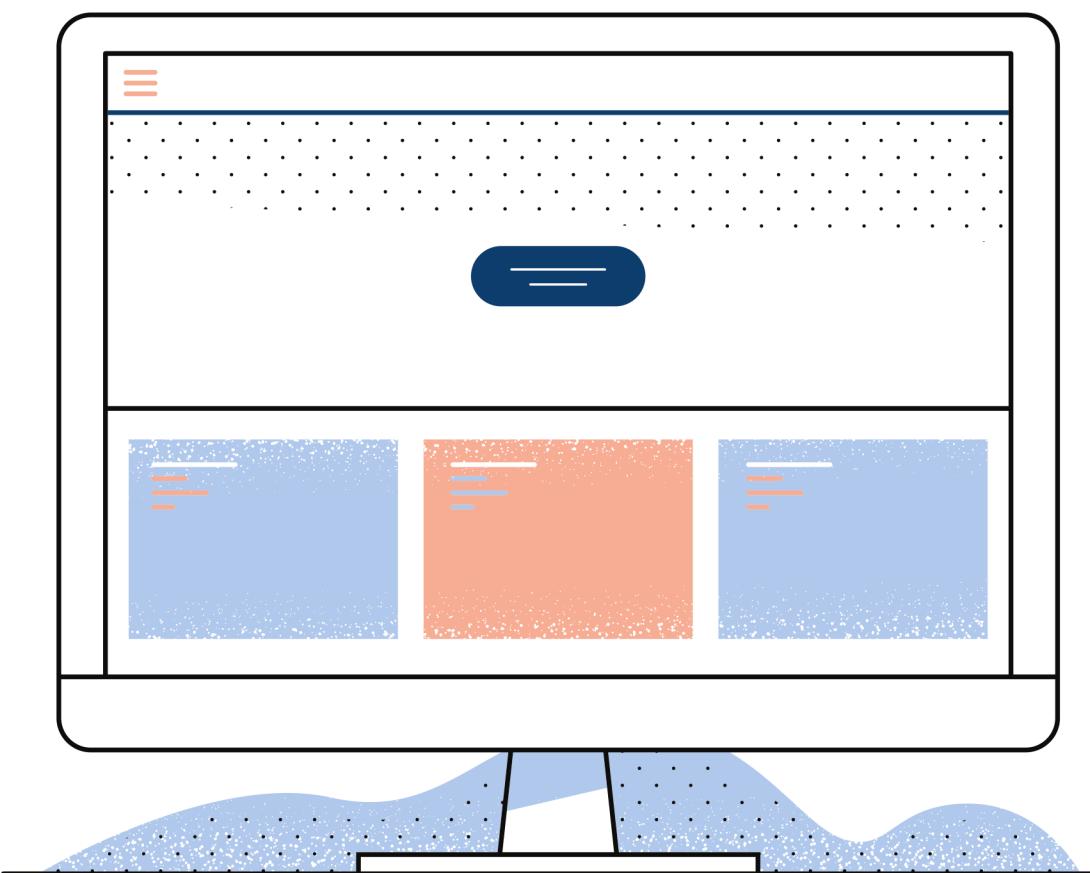


OSS Contribution Practice

Practice

Now it's your turn!

- github.com/devanshimodha/oss-projects-wwc
- Comment on open issue
- Fork & clone repo
- Save, stage, commit, and push changes
- Create a pull request
- Submit for review



Practice

Now it's your turn!

- Post in #open-source-and-personal-projects channel in WWCode Mobile Slack with a link to your PR!

