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EXPERIENTIAL LEARNING & GLOBAL ENGAGEMENT

# OPEN-SOURCE ENGINEERING

**Student ID:** 2400090115

**Semester:** Odd

**Academic Year:** 2025 – 2026

**Course Code:** 24CS02EF

Under the guidance of

**Dr. Sripath Roy Koganti,**
**Dr. Arunekumar Bala**

# 1. Understanding the Core Ubuntu Linux Distribution

## 1.1 Overview and Philosophy

Ubuntu is a powerful, free, and open-source operating system built on top of Debian Linux. It is widely recognized as the most popular Linux distribution for desktop usage due to its balance between stability, usability, and features. Developed by Canonical Ltd., Ubuntu follows the principle of "Linux for human beings," focusing on accessibility and simplicity. Its design makes it suitable for beginners as well as advanced developers.

## 1.2 Desktop Experience (GNOME)

Ubuntu uses the GNOME desktop environment, which offers a clean, modern, and efficient user interface. The left-side dock provides immediate access to essential applications, while the Activities Overview serves as a central workspace manager accessible through the Super key. Ubuntu provides strong hardware detection, making it easy for users to install and use without technical difficulties.

## 1.3 Software Management and Packaging

Ubuntu uses a dual software management system:

1. **APT (Advanced Packaging Tool):** Handles DEB packages for system software and applications.
2. **Snaps:** A containerized package format that includes all required dependencies, ensuring consistent performance across versions. Snaps run in isolated sandbox environments, improving security and reliability.

This combination offers a large, modern, and secure application ecosystem.

# 3. Encryption and GPG

## 2.1 Types of Encryption in Ubuntu

Ubuntu supports two major encryption mechanisms: Full Disk Encryption and File/Directory Encryption.

### 2.1.1 Full Disk Encryption (FDE)

- Fully encrypts the entire disk, including OS files and user data.
- Uses LUKS (Linux Unified Key Setup).
- Requires a passphrase at boot time.
- Protects data from physical theft.

- Usually enabled during OS installation.

### 2.1.2 File and Directory Encryption

Allows selective encryption of files or folders.
Tools include:

- **GPG (GNU Privacy Guard):** Encrypts files and messages using public-key cryptography.
- **eCryptfs (legacy):** Used for encrypting the Home directory (now replaced by FDE).

## 2.2 GPG (GNU Privacy Guard)

### 2.2.1 Key Concepts

GPG uses asymmetric cryptography:

- **Public Key:** Shared with others; used for encryption and signature verification.
- **Private Key:** Kept secret; used for decrypting and signing.

### 2.2.2 Basic GPG Commands

**Generate a Key Pair:**

```
gpg --full-generate-key
```

**Encrypt a File (Symmetric):**

```
gpg -c myfile.txt
```

**Encrypt for a Recipient (Asymmetric):**

```
gpg --encrypt --recipient "recipient@example.com" mysecretfile.doc
```

**Decrypt a File:**

```
gpg --decrypt mysecretfile.doc.gpg
```

# 4. Sending Encrypted Email

## 3.1 Prerequisites

Both sender and recipient must:

1. Generate GPG keys.
2. Exchange Public Keys.
3. Import each other’s keys using:

```
gpg --import recipient_key.asc
```

## 3.2 Sending Encrypted Email Using Thunderbird

## 3.2.1 Compose the Email

Write your message normally.

### 3.2.2 Apply Encryption and Signature

Using Thunderbird’s OpenPGP tools:

- Enable **Encrypt**
- Enable **Sign**

Thunderbird will use:

- Your **Private Key** to sign.
- Recipient’s **Public Key** to encrypt.

### 3.2.3 Verification and Sending

The email is encrypted and signed before being sent.

### 3.2.4 Recipient Decryption Process

The recipient:

- Uses their Private Key to decrypt.
- Uses your Public Key to verify authenticity.

# 4. Privacy Tools From PRISM-BREAK

## 4.1 Tor Browser

A privacy-preserving browser that routes traffic through the Tor network, preventing tracking, fingerprinting, and IP exposure.

## 4.2 Debian

A fully open-source GNU/Linux OS known for stability and strict free-software principles. Highly trusted for privacy.

## 4.3 Thunderbird

A secure, open-source email client with built-in OpenPGP encryption for safe communication.

## 4.4 KeePassXC

A local password manager that encrypts all credentials in one secure database.

## 4.5 Firefox

A privacy-focused browser that supports strong tracking protection and customizable security extensions.

## 5. Open Source License (MIT License)

### 5.1 Purpose and Classification

The MIT License is one of the most widely used permissive open-source licenses. It allows broad freedom for reuse, modification, and distribution, even in commercial software.

### 5.2 Granted Rights

The license permits users to:

- Use
- Copy
- Modify
- Merge
- Publish
- Distribute
- Sublicense
- Sell

as long as they follow the required conditions.

### 5.3 Distribution Requirements

Only two conditions:

1. Include the original copyright notice.
2. Include the full MIT License text.

### 5.4 Disclaimer of Warranty

All MIT-licensed software is provided “AS IS,” with no warranty. Authors are not responsible for damages or issues arising from use.

## 6. Self-Hosted Server – Wikmd (Wiki Server)

### 6.1 About

Wikmd is a lightweight, open-source wiki server designed for simple documentation. It uses Markdown files for content storage and regenerates pages instantly after edits. Its minimal setup makes it ideal for students and developers wanting full control over their data.

## 6.2 Key Features

- Markdown-based editing
- No database required
- Instant updates
- Clean user interface
- Easy folder structure
- Fully open source

## 6.3 Installation Process (My Self-Host Setup)

### Step 1: Install Python and Git

```
sudo apt update
sudo apt install python3 python3-pip git
```

**Step 2: Clone Wikmd**

```
git clone https://github.com/LukeSmithxyz/wikmd.git
cd wikmd
```

**Step 3: Install Dependencies**

```
pip3 install -r requirements.txt
```

**Step 4: Start the Server**

```
python3 wikmd.py
```

Runs on:
http://localhost:5000

## 6.4 Making the Server Public Using Ngrok

**Step 1: Install Ngrok**

Downloaded from official site.

**Step 2: Expose Port 5000**

```
ngrok http 5000
```

**Step 3: Public URL**

Ngrok generates a public link, e.g.:
https://random-id.ngrok.io
Anyone can access the site through this link.

## 6.5 Summary of My Self-Hosting Experience

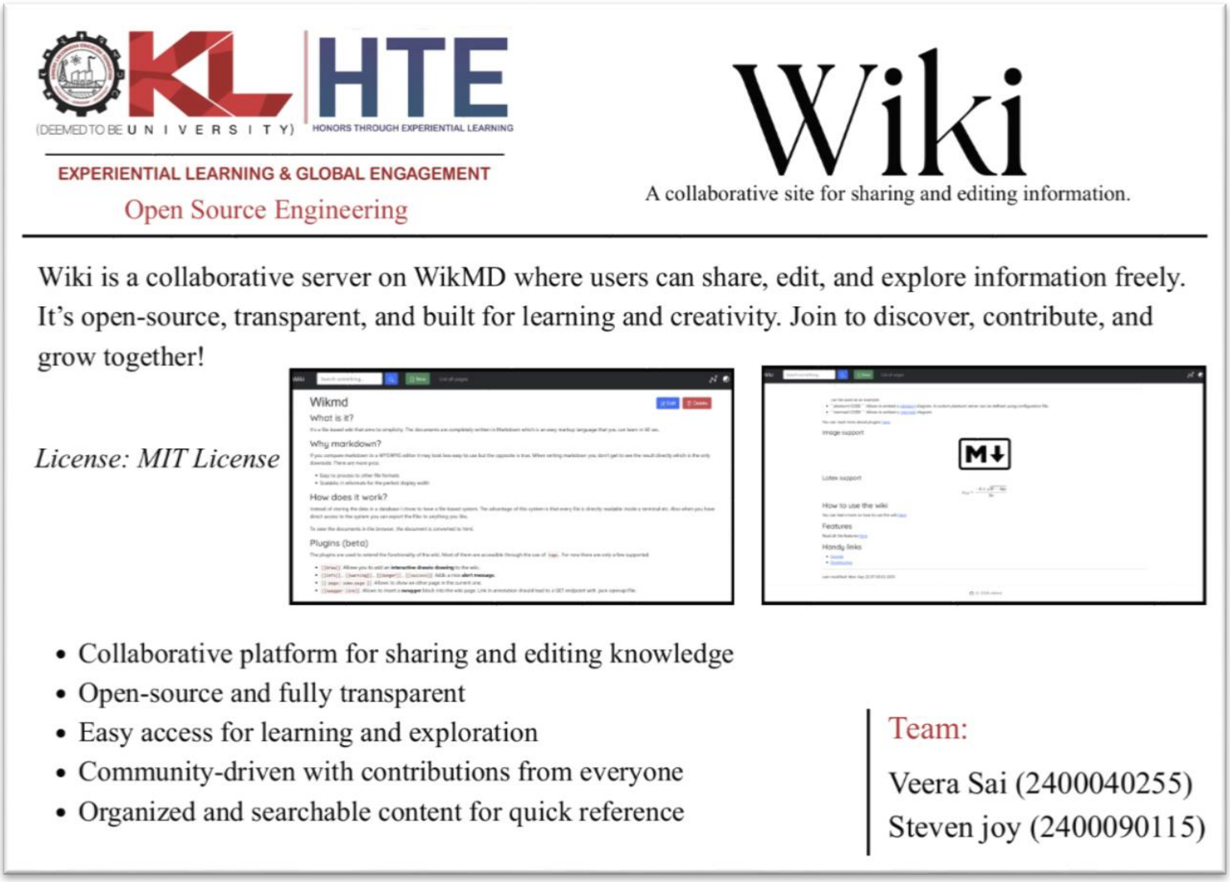
This project taught me:

- How local servers work
- Basics of networking and ports
- How tunneling exposes local apps globally
- Fundamentals of hosting websites

It was my first experience hosting a service myself, giving me a strong understanding of how websites function.

WikMD

Translated document



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Open Source Engineering

Wiki

A collaborative site for sharing and editing information.

Wiki is a collaborative server on WikMD where users can share, edit, and explore information freely. It's open-source, transparent, and built for learning and creativity. Join to discover, contribute, and grow together!

*License: MIT License*

- Collaborative platform for sharing and editing knowledge
- Open-source and fully transparent
- Easy access for learning and exploration
- Community-driven with contributions from everyone
- Organized and searchable content for quick reference

Team:

Veera Sai (2400040255)

Steven joy (2400090115)

## 7. Open Source Contribution

### 7.1 PR 1: First Contribution

### 7.1.1 Goal

The aim of the project is to help beginners understand the basic open-source contribution workflow. It explains how to make a simple contribution by adding your name to the *Contributors.md* file.

### 7.1.2 The Contribution Workflow

The tutorial follows the standard steps used in almost every open-source project:

**Fork - Clone - Edit - Pull Request**

This is the main process used for team collaboration on GitHub.

### 7.1.3 1. Setup

- **Fork:** Create your own copy of the repository on your GitHub account.
- **Clone:** Download your fork to your computer using git clone with the SSH URL.
- **Prerequisites:** You must have Git installed. If you don't prefer command line, GUI tools are suggested as alternatives.

### 7.1.4 2. Making Changes

- **Create Branch:** Make a new branch for your changes:
  ```
  git switch -c your-new-branch-name
  ```
- **Edit:** Open *Contributors.md* and add your name.
- **Commit:**
  - Stage the file: git add Contributors.md
  - Save the change:
    ```
    git commit -m "Add your-name to Contributors list"
    ```

### 7.1.5 3. Submission

- **Push:** Send your new branch to your GitHub fork:
  ```
  git push -u origin your-branch-name
  ```
- **Pull Request:**
  Go to your GitHub fork → click **"Compare & pull request"** → submit the PR for review by the maintainers.

### 7.1.6 Difficulties and Solutions

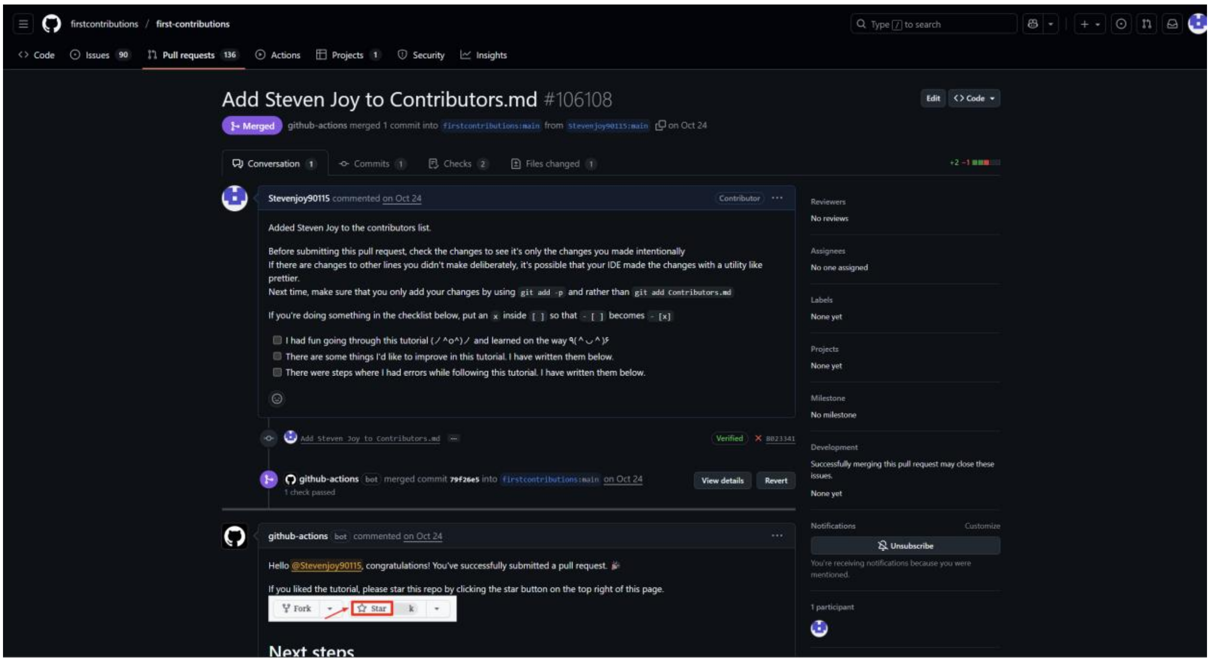
Two common beginner issues are covered:

- **Old Git Version:**
  If git switch doesn't work, use the older command:
  ```
  git checkout -b your-new-branch
  ```
- **Authentication Error:**
  GitHub no longer supports password-based authentication.
  Solution:
  - Use SSH keys or a Personal Access Token
  - Make sure your remote URL uses SSH:
    ```
    git remote set-url origin git@github.com:...
    ```

### 7.1.7 Next Steps

After your PR is merged, you've officially made your first open-source contribution!

You are encouraged to explore beginner-friendly issues in other projects and continue contributing.



Add Steven Joy to Contributors.md #106108

Merged github-actions merged 1 commit into `firstcontributions:main` from `Stevenjoy90115:main` on Oct 24

**Stevenjoy90115** commented on Oct 24 · Contributor

Added Steven Joy to the contributors list.

Before submitting this pull request, check the changes to see it's only the changes you made intentionally
If there are changes to other lines you didn't make deliberately, it's possible that your IDE made the changes with a utility like prettier.
Next time, make sure that you only add your changes by using `git add -p` and rather than `git add Contributors.md`

If you're doing something in the checklist below, put an `x` inside `[ ]` so that `- [ ]` becomes `- [x]`

- ☐ I had fun going through this tutorial (╯^o^)╯ and learned on the way ٩(^◡^)۶
- ☐ There are some things I'd like to improve in this tutorial. I have written them below.
- ☐ There were steps where I had errors while following this tutorial. I have written them below.

`Add Steven Joy to Contributors.md` · Verified ✕ `8023341`

**github-actions** bot merged commit `79f26e5` into `firstcontributions:main` on Oct 24
1 check passed

**github-actions** bot commented on Oct 24

Hello @Stevenjoy90115, congratulations! You've successfully submitted a pull request. 🎉

If you liked the tutorial, please star this repo by clicking the star button on the top right of this page.

Next steps

Reviewers
No reviews

Assignees
No one assigned

Labels
None yet

Projects
None yet

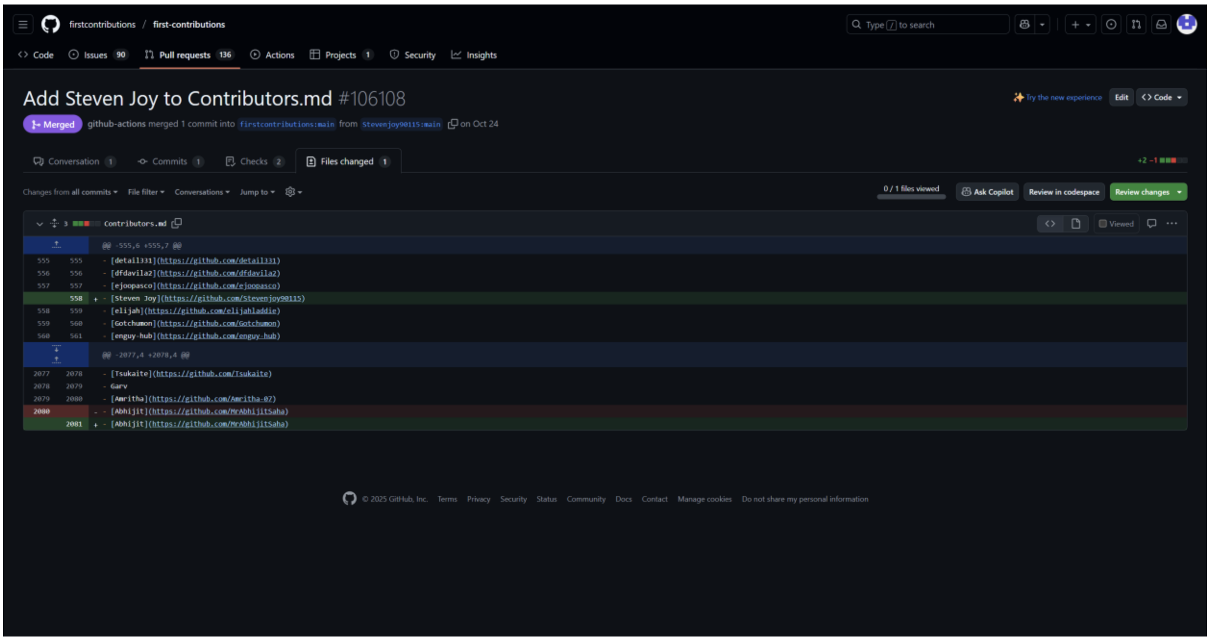
Milestone
No milestone

Development
Successfully merging this pull request may close these issues.
None yet

Notifications · Customize

You're receiving notifications because you were mentioned.

1 participant



Add Steven Joy to Contributors.md #106108

Merged github-actions merged 1 commit into `firstcontributions:main` from `Stevenjoy90115:main` on Oct 24

3 Contributors.md

```
@@ -555,6 +555,7 @@
  - [detail331](https://github.com/detail331)
  - [dfdavila2](https://github.com/dfdavila2)
  - [ejoopasco](https://github.com/ejoopasco)
+ - [Steven Joy](https://github.com/Stevenjoy90115)
  - [elijah](https://github.com/elijahladdie)
  - [Gotchumon](https://github.com/Gotchumon)
  - [enguy-hub](https://github.com/enguy-hub)
@@ -2077,4 +2078,4 @@
  - [Tsukaite](https://github.com/Tsukaite)
  - Garv
  - [Amritha](https://github.com/Amritha-07)
- - [Abhijit](https://github.com/MrAbhijitSaha)
+ - [Abhijit](https://github.com/MrAbhijitSaha)
```

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## 7.2 PR 2 : Adding CONTRIBUTING.md

### 7.2.1 Goal

The objective of this pull request was to **add a structured CONTRIBUTING.md file** to the project.
This file serves as a guideline for new contributors, explaining how to set up the project environment, follow coding standards, and submit high-quality pull requests.

### 7.2.2 Contribution Overview

This PR introduced a complete **CONTRIBUTING.md** document, which enhances the project's maintainability and helps beginners understand the open-source workflow.
The file includes instructions for:

- Project setup
- Branching guidelines
- Commit message standards
- Code style rules
- Procedure to create PRs
- Issue reporting guidelines

### 7.2.3 Steps Followed

**1. Local Setup**

- Forked the repository on GitHub.
- Cloned the project using SSH:
- git clone git@github.com:stevenjoy90115/<repo-name>.git
- Created a feature branch:
- git switch -c add-contributing-md

### 7.2.4 2. Creating the File

- Created a new file named **CONTRIBUTING.md**.
- Added detailed sections such as:
  - How to fork and clone the project
  - How to create branches
  - Coding standards
  - Commit style guide
  - PR review process
- Ensured the content was clear and beginner-friendly.

### 7.2.5 3. Committing the Changes

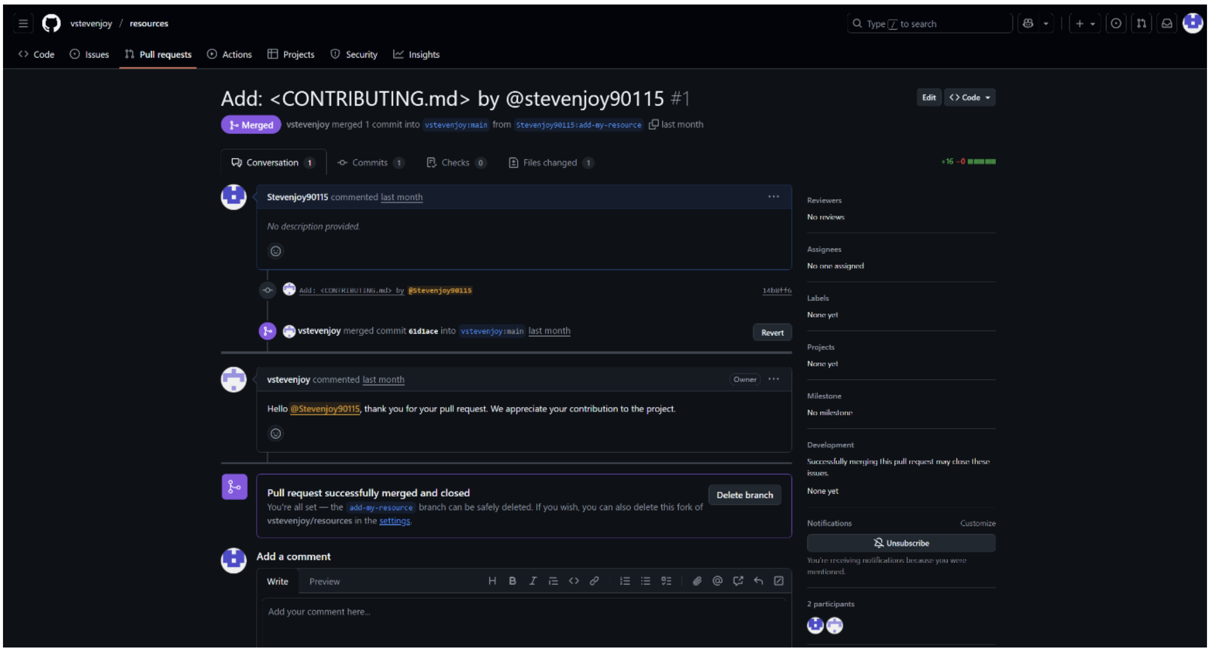
Commands used:

```
git add CONTRIBUTING.md

git commit -m "Add: <CONTRIBUTING.md> by @stevenjoy90115 #1"
```

### 7.2.6 4. Submitting the PR

- Pushed the branch:
- git push -u origin add-contributing-md
- On GitHub, opened a PR with the message:
  **“Add: <CONTRIBUTING.md> by @stevenjoy90115”**



Add: <CONTRIBUTING.md> by @stevenjoy90115 #1

Merged vstevenjoy merged 1 commit into vstevenjoy:main from Stevenjoy90115:add-my-resource last month

Stevenjoy90115 commented last month

*No description provided.*

Add: <CONTRIBUTING.md> by @Stevenjoy90115 14b8ff6

vstevenjoy merged commit 61d1ace into vstevenjoy:main last month

vstevenjoy commented last month

Hello @Stevenjoy90115, thank you for your pull request. We appreciate your contribution to the project.

Pull request successfully merged and closed

You're all set — the add-my-resource branch can be safely deleted. If you wish, you can also delete this fork of vstevenjoy/resources in the settings.

Add a comment

Add your comment here...

Reviewers: No reviews

Assignees: No one assigned

Labels: None yet

Projects: None yet

Milestone: No milestone

Development: Successfully merging this pull request may close these issues. None yet

Notifications: You're receiving notifications because you were mentioned.

2 participants

## 7.2 PR 3 : Third Contribution

### 7.2.1 Goal

The objective of this contribution was to add my name **“Steven Joy”** to the *Contributors.md* file in the **zero-to-mastery/start-here-guidelines** repository and complete another open-source Pull Request following the standard workflow.

### 7.2.2 The Contribution Workflow

This PR followed the same open-source workflow used by most GitHub projects:

**Fork → Clone → Create Branch → Edit → Commit → Push → Pull Request → Review → Merge**

### 7.2.3 1. Setup

- **Fork:** I created a personal fork of the *start-here-guidelines* repository on GitHub.
- **Clone:** I cloned the repository to my local system using the SSH URL and the git clone command.
- **Prerequisites:** Git was already installed, and SSH authentication was configured properly.

### 7.2.4 2. Making Changes

- **Branch:** I created a new branch for this specific update using:
  git switch -c add-stevenjoy
- **Edit:** I edited the *Contributors.md* file and added my name: **Steven Joy**.
- **Commit:** I staged and committed the changes using:
  - git add Contributors.md
  - git commit -m "Add Steven Joy to Contributors list"

### 7.2.5 3. Submission

- **Push:** I pushed my branch to my fork using:
  git push -u origin add-stevenjoy
- **Pull Request:**
  I opened a new PR titled **"Add Steven Joy"**.
  GitHub Actions automatically reviewed my PR and confirmed that it met all requirements.
- The maintainer **LaurelineP** reviewed and approved the PR, and finally merged it into the main branch.

### 7.2.6 Difficulties and Solutions

This PR did not involve any major difficulties, but the project used automated checks:

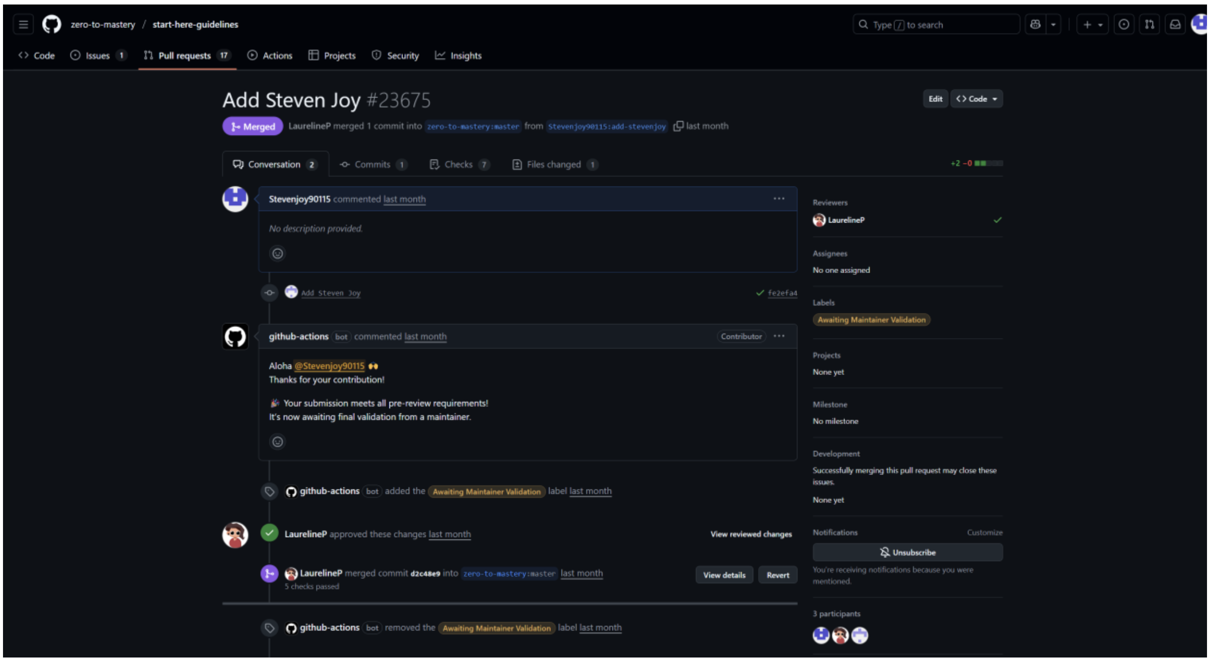
- **GitHub Actions Pre-Review:**
  My submission passed all automated validation tests successfully.
- **Maintainer Validation:**
  The PR was labeled *"Awaiting Maintainer Validation"* and was merged after manual approval.

### 7.2.7 Next Steps

**This successful PR marks my third contribution to open-source projects.
With each PR, I am building confidence in:**

- **Working with forks and branches**
- **Writing clean commits**
- **Passing automated CI/CD checks**
- **Collaborating with maintainers**
- **Following professional contribution workflows**

**My next goal is to contribute not only documentation but also issue fixes, feature enhancements, and code-level improvements in larger repositories.**



Add Steven Joy #23675

Merged LaurelineP merged 1 commit into `zero-to-mastery:master` from `Stevenjoy90115:add-stevenjoy` last month

Stevenjoy90115 commented last month

*No description provided.*

`Add Steven Joy` ✓ `fe2efa4`

github-actions bot commented last month

Aloha @Stevenjoy90115 🙌
Thanks for your contribution!

🎉 Your submission meets all pre-review requirements!
It's now awaiting final validation from a maintainer.

github-actions bot added the Awaiting Maintainer Validation label last month

LaurelineP approved these changes last month

LaurelineP merged commit d2c48e9 into `zero-to-mastery:master` last month
5 checks passed

github-actions bot removed the Awaiting Maintainer Validation label last month

Reviewers
LaurelineP ✓

Assignees
No one assigned

Labels
Awaiting Maintainer Validation

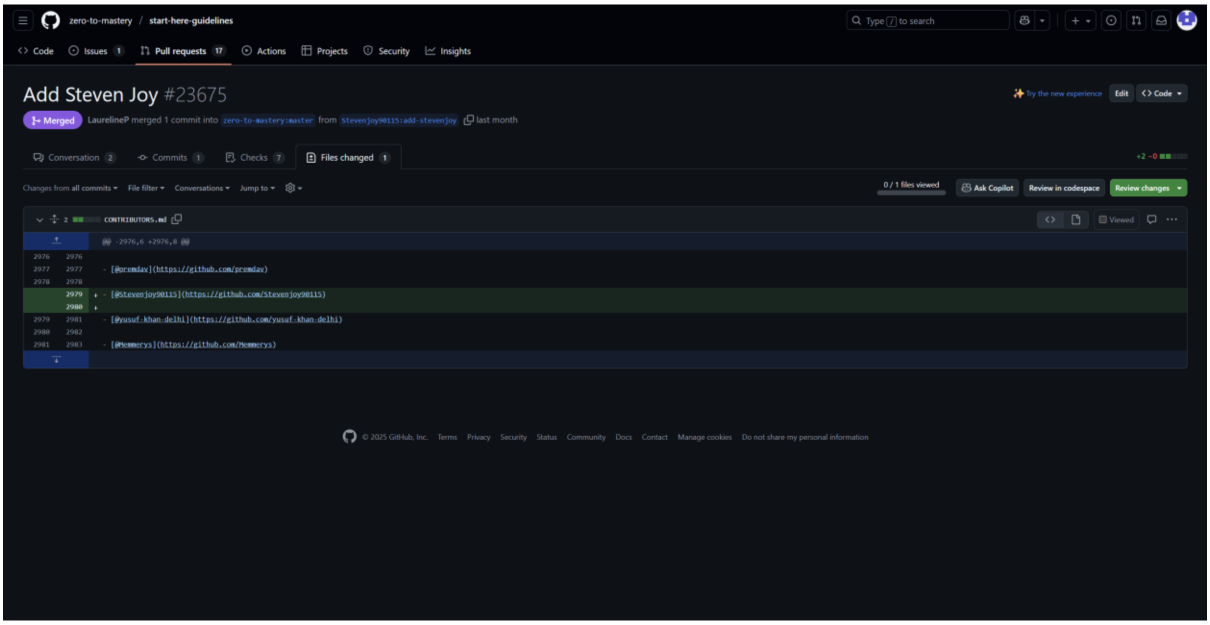
Projects
None yet

Milestone
No milestone

Development
Successfully merging this pull request may close these issues.
None yet

Notifications
You're receiving notifications because you were mentioned.

3 participants



Add Steven Joy #23675

Merged LaurelineP merged 1 commit into `zero-to-mastery:master` from `Stevenjoy90115:add-stevenjoy` last month

2 CONTRIBUTORS.md

```
@@ -2976,6 +2976,8 @@

 - [@premdav](https://github.com/premdav)

+- [@Stevenjoy90115](https://github.com/Stevenjoy90115)
+
 - [@yusuf-khan-delhi](https://github.com/yusuf-khan-delhi)

 - [@Memmerys](https://github.com/Memmerys)
```

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## 7.3 PR : Add Test for Math.max Handling of -0 and +0

### 7.3.1 Goal

The goal of this contribution was to add a JavaScript conformance test to the **Web-Platform-Tests (WPT)** project. The test verifies the correct ECMAScript behavior of Math.max(-0, +0) to ensure consistent results across major browsers.

### 7.3.2 The Contribution Workflow

Followed the standard **fork → clone → branch → edit → commit → push → pull request** workflow used in large collaborative open-source projects.

### 7.3.3 1. Setup

- Forked the official WPT repository.
- Cloned the repo using SSH.
- Created a new branch for test development.
- Ensured the test followed WPT's test structure and naming conventions.

### 7.3.4 2. Making Changes

- Added a new .any.js file that checks:
  Math.max(-0, 0) === 0
- Staged changes and committed with a descriptive message.

### 7.3.5 3. Submission

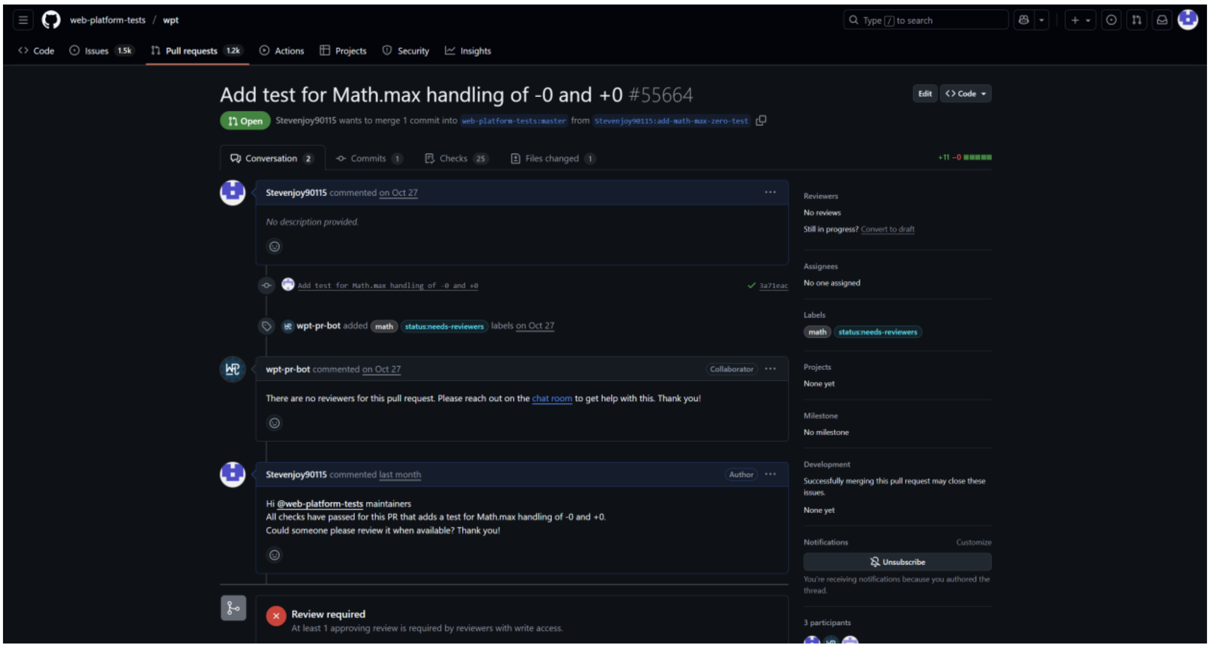
- Pushed the branch and opened a Pull Request titled
  **“Add test for Math.max handling of -0 and +0”**
- All automated checks passed successfully.
- The bot applied labels (math, status:needs-reviewers).
- Commented to notify WPT maintainers for review.

### 7.3.6 Difficulties and Solutions

- **No reviewer assigned**: Bot suggested reaching out; I tagged maintainers politely.
- **Strict test format**: Followed examples from existing Math tests to maintain consistency.

### 7.3.7 Next Steps

Waiting for official reviewer approval. After merging, the test will help ensure consistent JavaScript behavior across browsers.



Add test for Math.max handling of -0 and +0 #55664

Open Stevenjoy90115 wants to merge 1 commit into `web-platform-tests:master` from `Stevenjoy90115:add-math-max-zero-test`

**Stevenjoy90115** commented on Oct 27

*No description provided.*

`Add test for Math.max handling of -0 and +0` ✓ `3a71eac`

**wpt-pr-bot** added math status:needs-reviewers labels on Oct 27

**wpt-pr-bot** commented on Oct 27 — Collaborator

There are no reviewers for this pull request. Please reach out on the chat room to get help with this. Thank you!

**Stevenjoy90115** commented last month — Author

Hi @web-platform-tests maintainers
All checks have passed for this PR that adds a test for Math.max handling of -0 and +0.
Could someone please review it when available? Thank you!

**Review required**
At least 1 approving review is required by reviewers with write access.

Reviewers
No reviews
Still in progress? Convert to draft

Assignees
No one assigned

Labels
math status:needs-reviewers

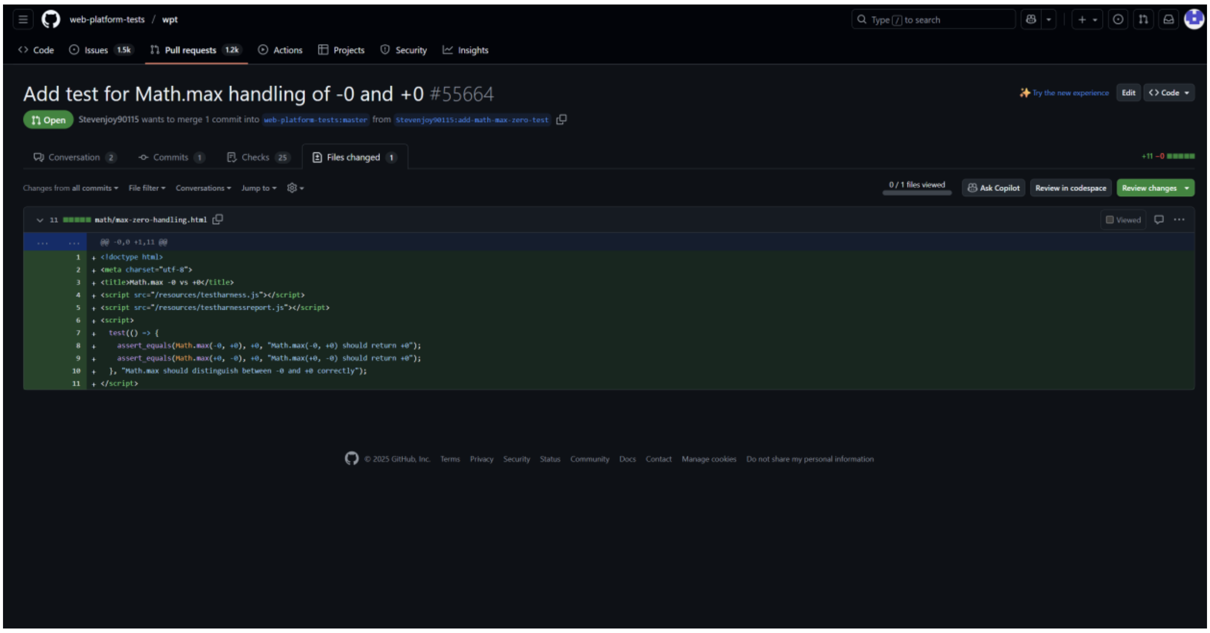
Projects
None yet

Milestone
No milestone

Development
Successfully merging this pull request may close these issues.
None yet

Notifications — Customize
Unsubscribe
You're receiving notifications because you authored the thread.

3 participants



Add test for Math.max handling of -0 and +0 #55664

Open Stevenjoy90115 wants to merge 1 commit into `web-platform-tests:master` from `Stevenjoy90115:add-math-max-zero-test`

11 `math/max-zero-handling.html`

```
@@ -0,0 +1,11 @@
+ <!doctype html>
+ <meta charset="utf-8">
+ <title>Math.max -0 vs +0</title>
+ <script src="/resources/testharness.js"></script>
+ <script src="/resources/testharnessreport.js"></script>
+ <script>
+   test(() => {
+     assert_equals(Math.max(-0, +0), +0, "Math.max(-0, +0) should return +0");
+     assert_equals(Math.max(+0, -0), +0, "Math.max(+0, -0) should return +0");
+   }, "Math.max should distinguish between -0 and +0 correctly");
+ </script>
```

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## 7.4 PR: Add Telugu Localized Documentation for Self-Hosted WiKMD

### 7.4.1 Goal

Enhanced accessibility of the Self-Hosted WiKMD project by adding a Telugu-localized documentation file. This helps Telugu-speaking users follow installation steps, usage instructions, and feature explanations more easily.

### 7.4.2 Contribution Workflow

Followed standard open-source workflow: fork → clone → branch → edit → commit → push → pull request, ensuring isolated, review-ready, and version-controlled changes.

### 7.4.3 Setup

- Forked and cloned WiKMD repository.
- Created a dedicated branch for Telugu localization.
- Reviewed existing documentation for formatting and tone.
- Followed documentation guidelines for consistency.

### 7.4.4 Making Changes

- Created wikmd_localized.md in the docs folder.
- Added: tool introduction, installation steps, features, benefits of self-hosting, demo links, and external references in Telugu.
- Ensured proper markdown formatting and tested Telugu rendering.
- Committed changes with descriptive messages.

### 7.4.5 Submission

- Pushed branch and opened PR: “Self-Hosted WiKMD – Telugu Documentation Added.”
- Included PR description explaining benefits.
- All checks passed; labels added; reviewers requested feedback.

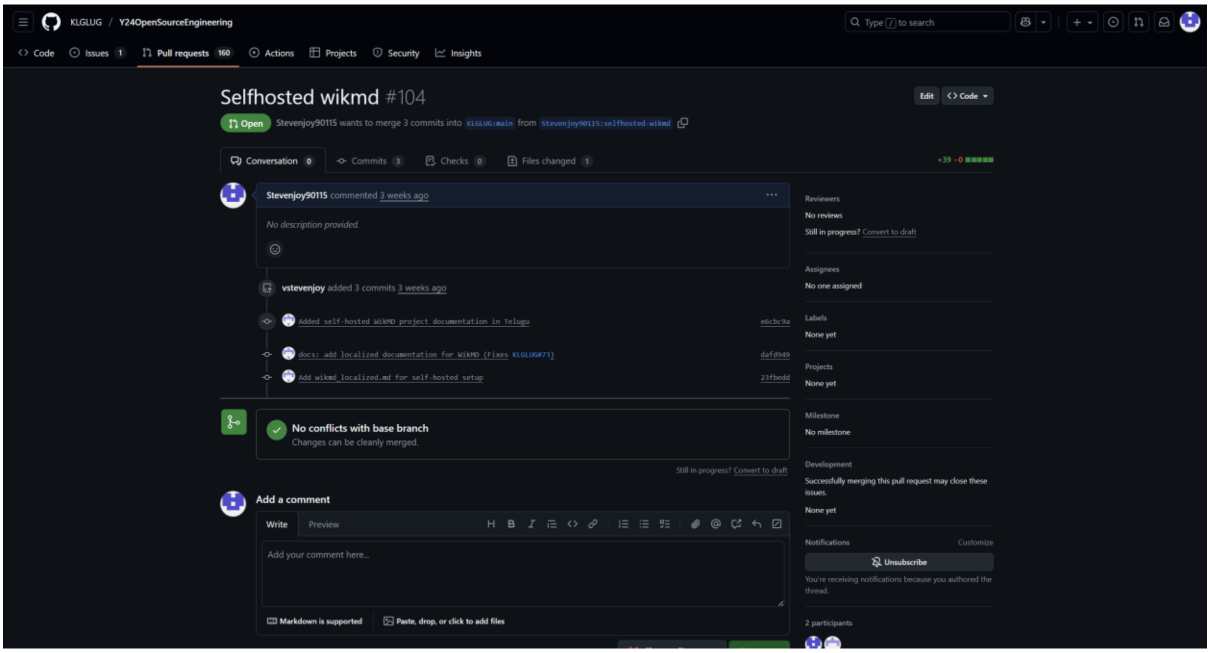
### 7.4.6 Challenges & Solutions

- Maintained structure and formatting consistent with English docs.
- Resolved Telugu rendering issues using UTF-8.

- Translated technical terms with transliterations and simple explanations.
- Verified installation steps against original README.

### 7.4.7 Next Steps

Awaiting reviewer approval. Once merged, Telugu documentation will officially help regional users. Future contributions may include expanding localization and creating beginner-friendly Telugu tutorials.



Selfhosted wikmd #104

Open Stevenjoy90115 wants to merge 3 commits into KLGLUG:main from Stevenjoy90115:selfhosted-wikmd

Stevenjoy90115 commented 3 weeks ago

*No description provided.*

vstevenjoy added 3 commits 3 weeks ago

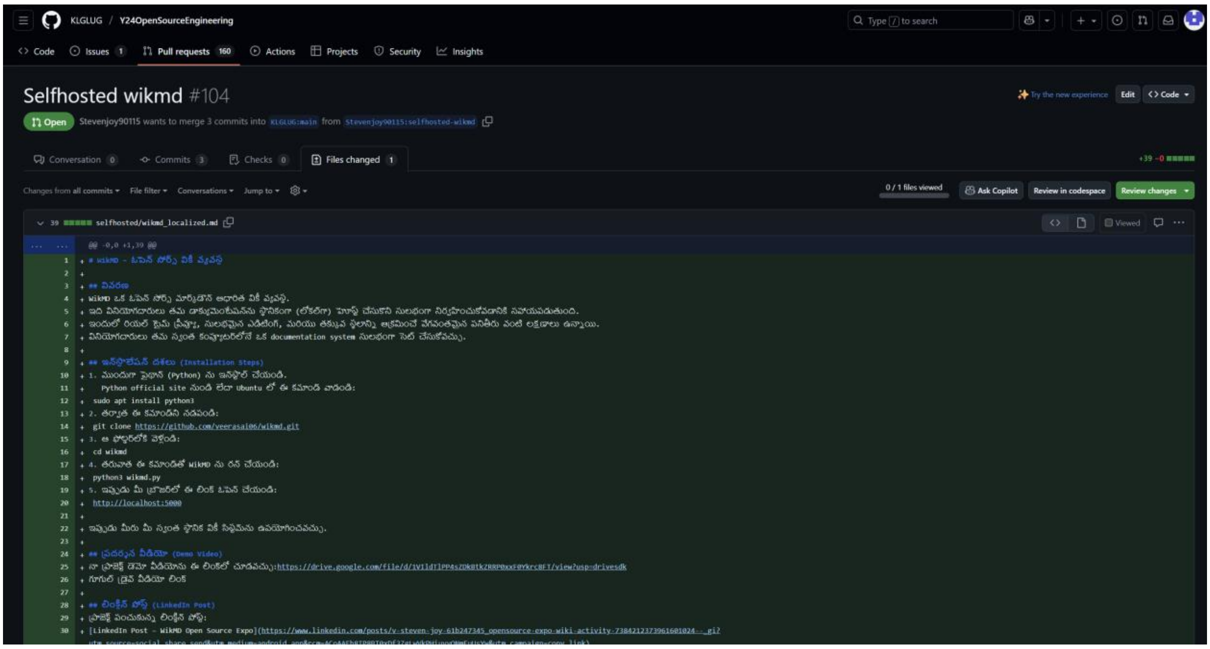
```
Added self-hosted WikMD project documentation in Telugu          e6cbc9a
docs: add localized documentation for WikMD (Fixes KLGLUG#73)    dafd949
Add wikmd_localized.md for self-hosted setup                     23fbedd
```

No conflicts with base branch
Changes can be cleanly merged.

Still in progress? Convert to draft

Add a comment

Add your comment here...



Selfhosted wikmd #104

Open Stevenjoy90115 wants to merge 3 commits into KLGLUG:main from Stevenjoy90115:selfhosted-wikmd

39 selfhosted/wikmd_localized.md

```
@@ -0,0 +1,39 @@
+ # WikMD - ఓపెన్ సోర్స్ వికీ వ్యవస్థ
+
+ ## వివరణ
+ WikMD ఒక ఓపెన్ సోర్స్ మార్క్‌డౌన్ ఆధారిత వికీ వ్యవస్థ.
+ ఇది వినియోగదారులు తమ డాక్యుమెంటేషన్‌ను స్థానికంగా (లోకల్‌గా) హోస్ట్ చేసుకొని సులభంగా నిర్వహించుకోవడానికి సహాయపడుతుంది.
+ ఇందులో రియల్ టైమ్ ప్రివ్యూ, సులభమైన ఎడిటింగ్, మరియు తక్కువ స్థలాన్ని ఆక్రమించే వేగవంతమైన పనితీరు వంటి లక్షణాలు ఉన్నాయి.
+ వినియోగదారులు తమ స్వంత కంప్యూటర్‌లోనే ఒక documentation system సులభంగా సెట్ చేసుకోవచ్చు.
+
+ ## ఇన్‌స్టాలేషన్ దశలు (Installation Steps)
+ 1. ముందుగా పైథాన్ (Python) ను ఇన్‌స్టాల్ చేయండి.
+    Python official site నుండి లేదా Ubuntu లో ఈ కమాండ్ వాడండి:
+  sudo apt install python3
+ 2. తర్వాత ఈ కమాండ్‌ని నడపండి:
+  git clone https://github.com/veerasai06/wikmd.git
+ 3. ఆ ఫోల్డర్‌లోకి వెళ్లండి:
+  cd wikmd
+ 4. తరువాత ఈ కమాండ్‌తో WikMD ను రన్ చేయండి:
+  python3 wikmd.py
+ 5. ఇప్పుడు మీ బ్రౌజర్‌లో ఈ లింక్ ఓపెన్ చేయండి:
+  http://localhost:5000
+
+ ఇప్పుడు మీరు మీ స్వంత స్థానిక వికీ సిస్టమ్‌ను ఉపయోగించవచ్చు.
+
+ ## ప్రదర్శన వీడియో (Demo Video)
+ నా ప్రాజెక్ట్ డెమో వీడియోను ఈ లింక్‌లో చూడవచ్చు:https://drive.google.com/file/d/1VIldTlPP4sZDk8tkZRRP0xxF0Ykrc8FT/view?usp=drivesdk
+ గూగుల్ డ్రైవ్ వీడియో లింక్
+
+ ## లింక్డిన్ పోస్ట్ (LinkedIn Post)
+ ప్రాజెక్ట్ పంచుకున్న లింక్డిన్ పోస్ట్:
+ [LinkedIn Post - WikMD Open Source Expo](https://www.linkedin.com/posts/v-steven-joy-61b247345_opensource-expo-wiki-activity-7384212373961601024--_gi?
  utm_source=social_share_send&utm_medium=android_app&rcm=ACoAAFh8TP8RT0xDf37gLWdkPHipoQWmEuUsYw&utm_campaign=copy_link)
```

## 7.5 PR: Add Loading Spinner Feature (#24114)

### 7.5.1 Goal

Implemented a loading spinner to improve user experience by visually indicating ongoing background operations or data fetching. This helps users understand that the system is processing and prevents confusion during wait times.

### 7.5.2 Contribution Workflow

Followed standard open-source workflow: fork → clone → branch → edit → commit → push → pull request, ensuring organized and review-ready changes.

### 7.5.3 Setup

- Forked and cloned the repository.
- Created a dedicated branch for the spinner feature.
- Reviewed existing UI components and styling guidelines to maintain consistency.

### 7.5.4 Making Changes

- Added a reusable loading spinner component.
- Integrated spinner in key areas where asynchronous data is fetched.
- Ensured smooth animation and proper positioning across different screen sizes.
- Tested component in development environment to verify functionality and appearance.
- Committed changes with clear, descriptive messages.

### 7.5.5 Submission

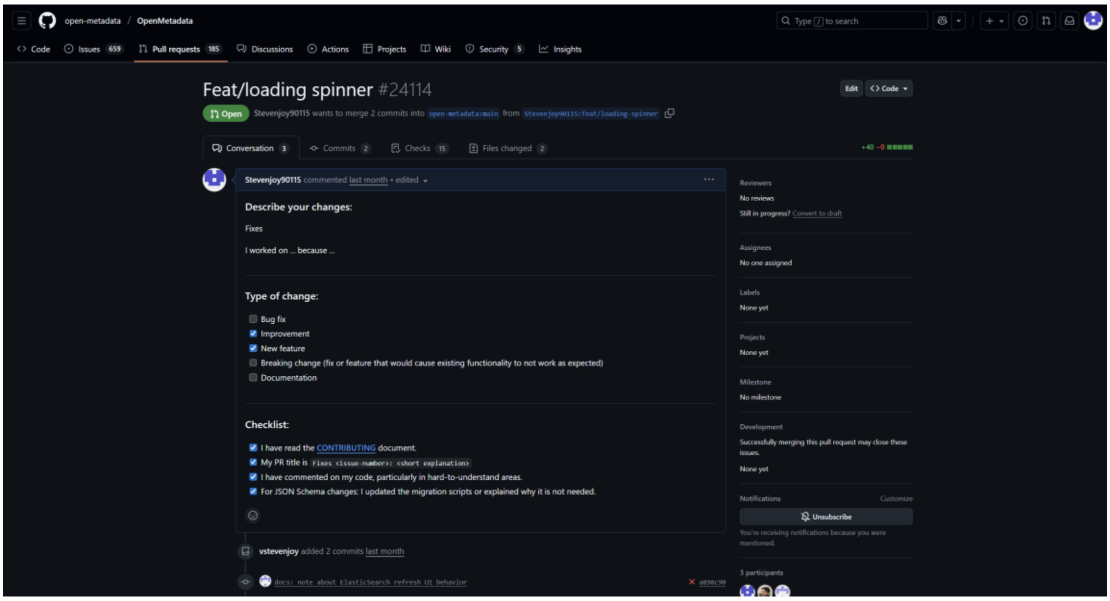
- Pushed branch and opened PR: "Feat: Loading Spinner #24114."
- Added PR description explaining purpose and UX benefits.
- Automated checks passed; reviewers requested for feedback and approval.

### 7.5.6 Challenges & Solutions

- **Cross-Browser Rendering:** Ensured spinner animations render correctly in all supported browsers.
- **Reusability:** Created a modular component to avoid duplication in multiple pages.

### 7.5.7 Next Steps

Awaiting reviewer approval. After merge, the spinner will enhance user experience across the application. Future improvements may include customizing spinner styles for different modules and adding accessibility enhancements.



Feat/loading spinner #24114

Open Stevenjoy90115 wants to merge 2 commits into `open-metadata:main` from `Stevenjoy90115:feat/loading-spinner`

Stevenjoy90115 commented last month • edited

**Describe your changes:**

Fixes

I worked on ... because ...

**Type of change:**

- ☐ Bug fix
- ☑ Improvement
- ☑ New feature
- ☐ Breaking change (fix or feature that would cause existing functionality to not work as expected)
- ☐ Documentation

**Checklist:**

- ☑ I have read the CONTRIBUTING document.
- ☑ My PR title is `Fixes <issue-number>: <short explanation>`
- ☑ I have commented on my code, particularly in hard-to-understand areas.
- ☑ For JSON Schema changes: I updated the migration scripts or explained why it is not needed.

vstevenjoy added 2 commits last month

`docs: note about ElasticSearch refresh UI behavior` ✕ a898c90

Reviewers

No reviews

Still in progress? Convert to draft

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

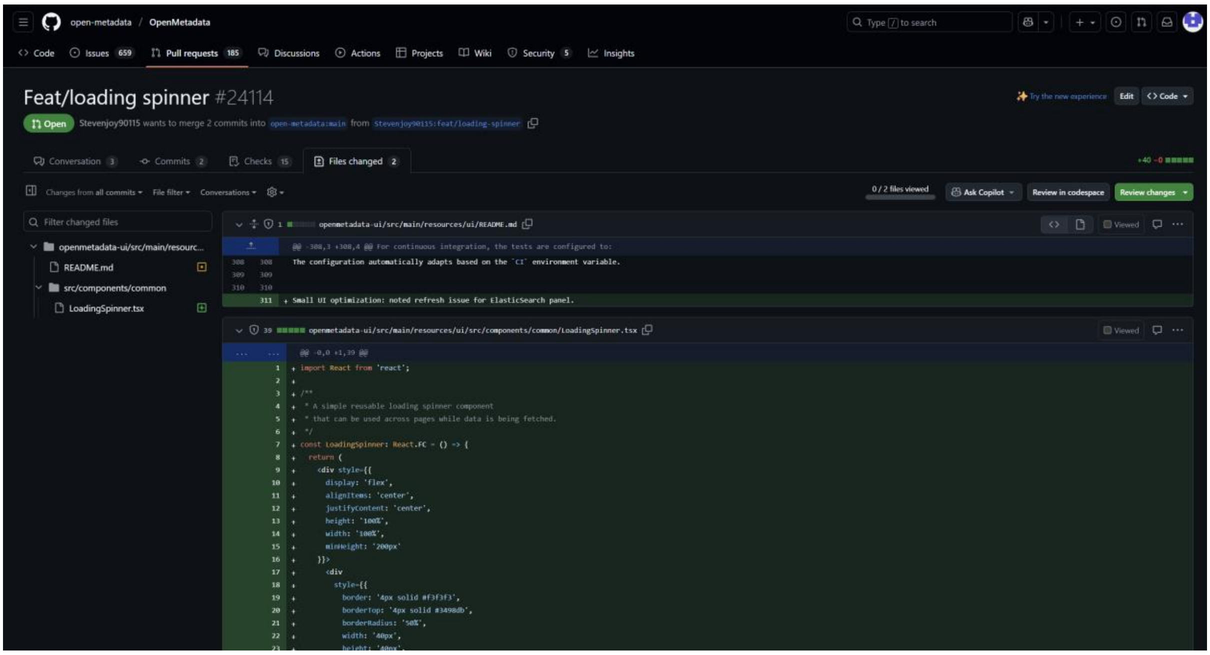
None yet

Notifications Customize

Unsubscribe

You're receiving notifications because you were mentioned.

3 participants



Feat/loading spinner #24114

Open Stevenjoy90115 wants to merge 2 commits into `open-metadata:main` from `Stevenjoy90115:feat/loading-spinner`

- openmetadata-ui/src/main/resourc...
  - README.md
- src/components/common
  - LoadingSpinner.tsx

1 openmetadata-ui/src/main/resources/ui/README.md

```
@@ -308,3 +308,4 @@ For continuous integration, the tests are configured to:
 The configuration automatically adapts based on the `CI` environment variable.


+ Small UI optimization: noted refresh issue for ElasticSearch panel.
```

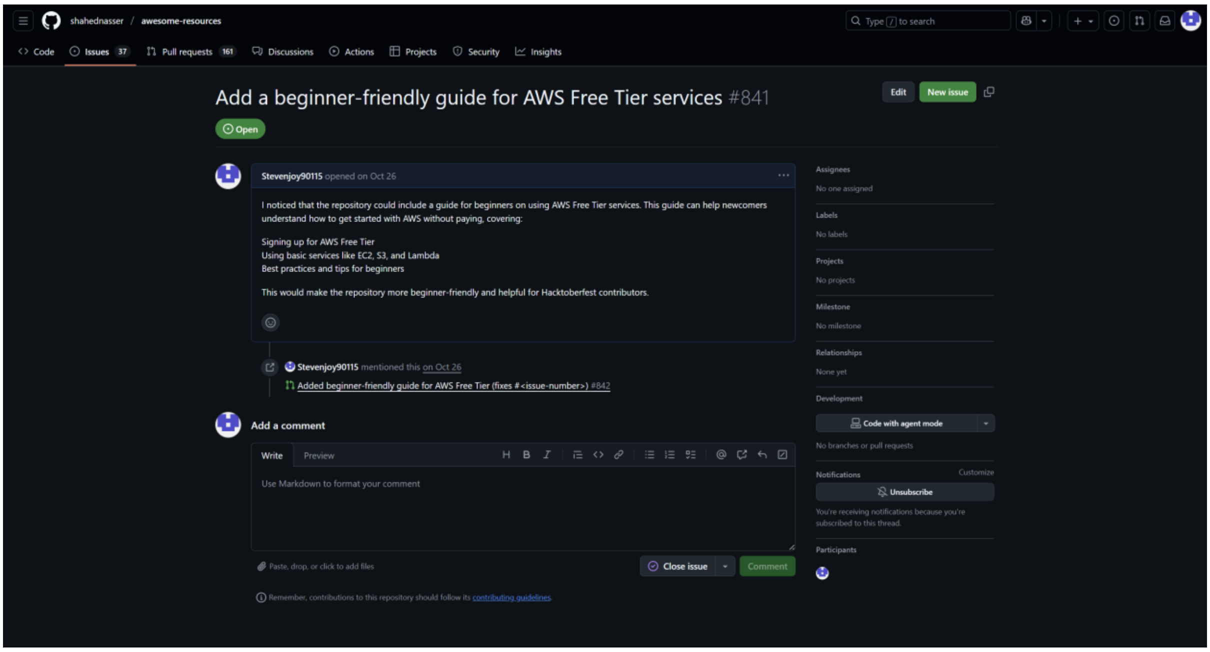
39 openmetadata-ui/src/main/resources/ui/src/components/common/LoadingSpinner.tsx

```
@@ -0,0 +1,39 @@
+ import React from 'react';
+
+ /**
+  * A simple reusable loading spinner component
+  * that can be used across pages while data is being fetched.
+  */
+ const LoadingSpinner: React.FC = () => {
+   return (
+     <div style={{
+       display: 'flex',
+       alignItems: 'center',
+       justifyContent: 'center',
+       height: '100%',
+       width: '100%',
+       minHeight: '200px'
+     }}>
+       <div
+         style={{
+           border: '4px solid #f3f3f3',
+           borderTop: '4px solid #3498db',
+           borderRadius: '50%',
+           width: '40px',
+           height: '40px',
```

## 7.6 Issues

### 7.6.1 Issue 1: Beginner-Friendly AWS Free Tier Guide (#841)

- **Opened by:** Stevenjoy90115
- **Date Opened:** Oct 26
- **Status:** Open
- **Description:**
  Suggested adding a beginner-friendly guide for AWS Free Tier services to help newcomers understand how to get started without paying. The guide should cover:
  - Signing up for AWS Free Tier
  - Using basic services like EC2, S3, and Lambda
  - Best practices and tips for beginners
- **Purpose:**
  Making the repository more beginner-friendly and helpful for Hacktoberfest contributors.
- **Linked Pull Request:**
  Added beginner-friendly guide for AWS Free Tier (#842)



Add a beginner-friendly guide for AWS Free Tier services #841

Stevenjoy90115 opened on Oct 26

I noticed that the repository could include a guide for beginners on using AWS Free Tier services. This guide can help newcomers understand how to get started with AWS without paying, covering:

Signing up for AWS Free Tier
Using basic services like EC2, S3, and Lambda
Best practices and tips for beginners

This would make the repository more beginner-friendly and helpful for Hacktoberfest contributors.

Stevenjoy90115 mentioned this on Oct 26

Added beginner-friendly guide for AWS Free Tier (fixes #<issue-number>) #842

Add a comment

Use Markdown to format your comment

Paste, drop, or click to add files

Remember, contributions to this repository should follow its contributing guidelines.

Assignees: No one assigned

Labels: No labels

Projects: No projects

Milestone: No milestone

Relationships: None yet

Development: No branches or pull requests

Notifications: You're receiving notifications because you're subscribed to this thread.

Participants

### 7.62 Issue 2: Math.max -0 vs +0 Test

Ensure Math.max correctly distinguishes between -0 and +0 in JavaScript.

Steps

1. Branch Setup

```
git switch -c test-mathmax-zero
```

2. Test Added

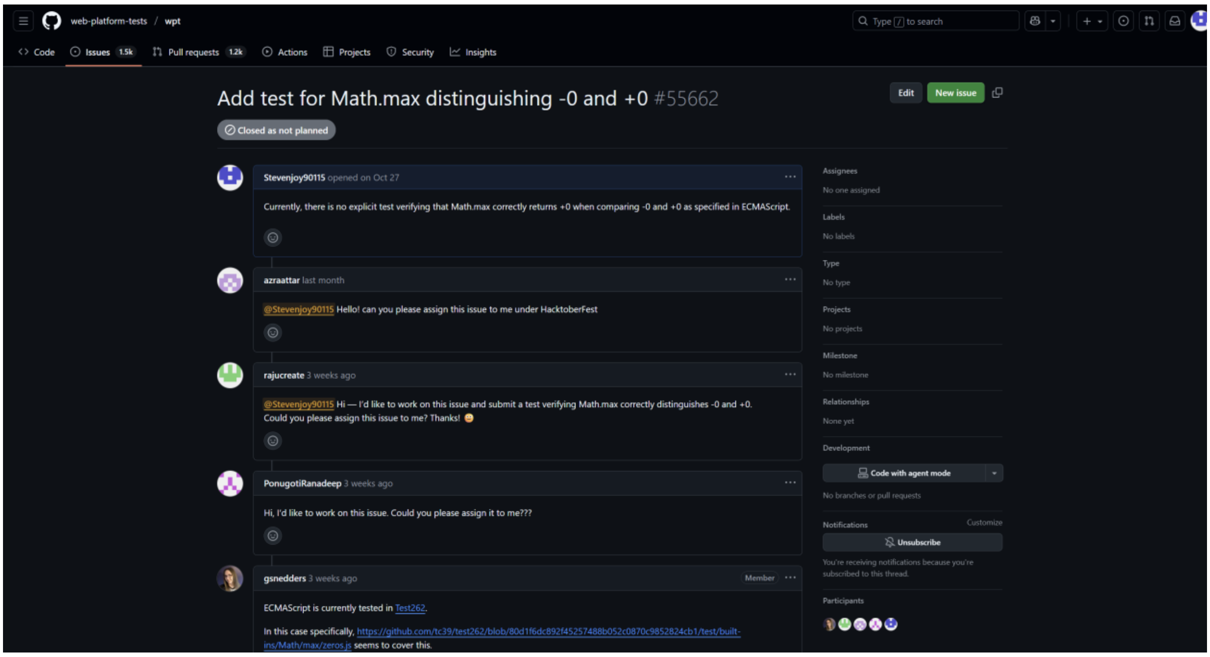
```
it('Math.max distinguishes -0 and +0', () => {
  expect(Math.max(-0, +0)).toBe(+0);
  expect(1 / Math.max(-0, +0)).toBe(Infinity);
});
```

3. Commit & Push

```
git commit -m "Add test for Math.max distinguishing -0 and +0 #55662"
git push -u origin test-mathmax-zero
```

Outcome

Test confirms Math.max handles signed zeros correctly, improving numeric reliability.



Add test for Math.max distinguishing -0 and +0 #55662

Closed as not planned

**Stevenjoy90115** opened on Oct 27

Currently, there is no explicit test verifying that Math.max correctly returns +0 when comparing -0 and +0 as specified in ECMAScript.

**azraattar** last month

@Stevenjoy90115 Hello! can you please assign this issue to me under HacktoberFest

**rajucreate** 3 weeks ago

@Stevenjoy90115 Hi — I'd like to work on this issue and submit a test verifying Math.max correctly distinguishes -0 and +0.
Could you please assign this issue to me? Thanks! 😀

**PonugotiRanadeep** 3 weeks ago

Hi, I'd like to work on this issue. Could you please assign it to me???

**gsnedders** 3 weeks ago Member

ECMAScript is currently tested in Test262.

In this case specifically, https://github.com/tc39/test262/blob/80d1f6dc892f45257488b052c0870c9852824cb1/test/built-ins/Math/max/zeros.js seems to cover this.

Assignees
No one assigned

Labels
No labels

Type
No type

Projects
No projects

Milestone
No milestone

Relationships
None yet

Development
No branches or pull requests

Notifications
You're receiving notifications because you're subscribed to this thread.

Participants

8 Linkedin Post Links

https://www.linkedin.com/posts/v-steven-joy-61b247345_opensource-expo-wiki-ugcPost-7384212372959330305-83XY?utm_source=social_share_send&utm_medium=member_desktop_web&rcm=ACoAAFZa3rcBRn84Raycc0KYY9mvBRKPiCEXJVc

Journey Of Open Source :

https://www.linkedin.com/posts/v-steven-joy-61b247345_ugcPost-7399121914633551874-EEW2?utm_source=share&utm_medium=member_desktop&rcm=ACoAAFZa3rcBRn84Raycc0KYY9mvBRKPiCEXJVc