

Using The Code and not the Copy-Pasta

By Uddhav Phatak



Who am I?





Who am I?

- Google Summer of Code Contributor @ The Linux Foundation(OpenPrinting)
 - Led the migration of C++ free libcupsfilters.
- Open Source Contributor to OpenPrinting
 - Leading the development of First Fully Permissible PDF renderer.
- Embedded systems Intern at **Harman**
- Heavy interests in Linux Kernel Code
- Thinks kangaroos are Cool.



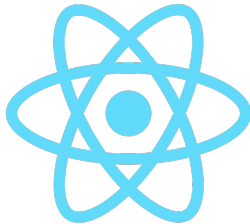
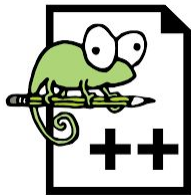
What is Open Source?



VS



Examples of Open Source Projects



freeCodeCamp(🔥)

DuckDuckGo



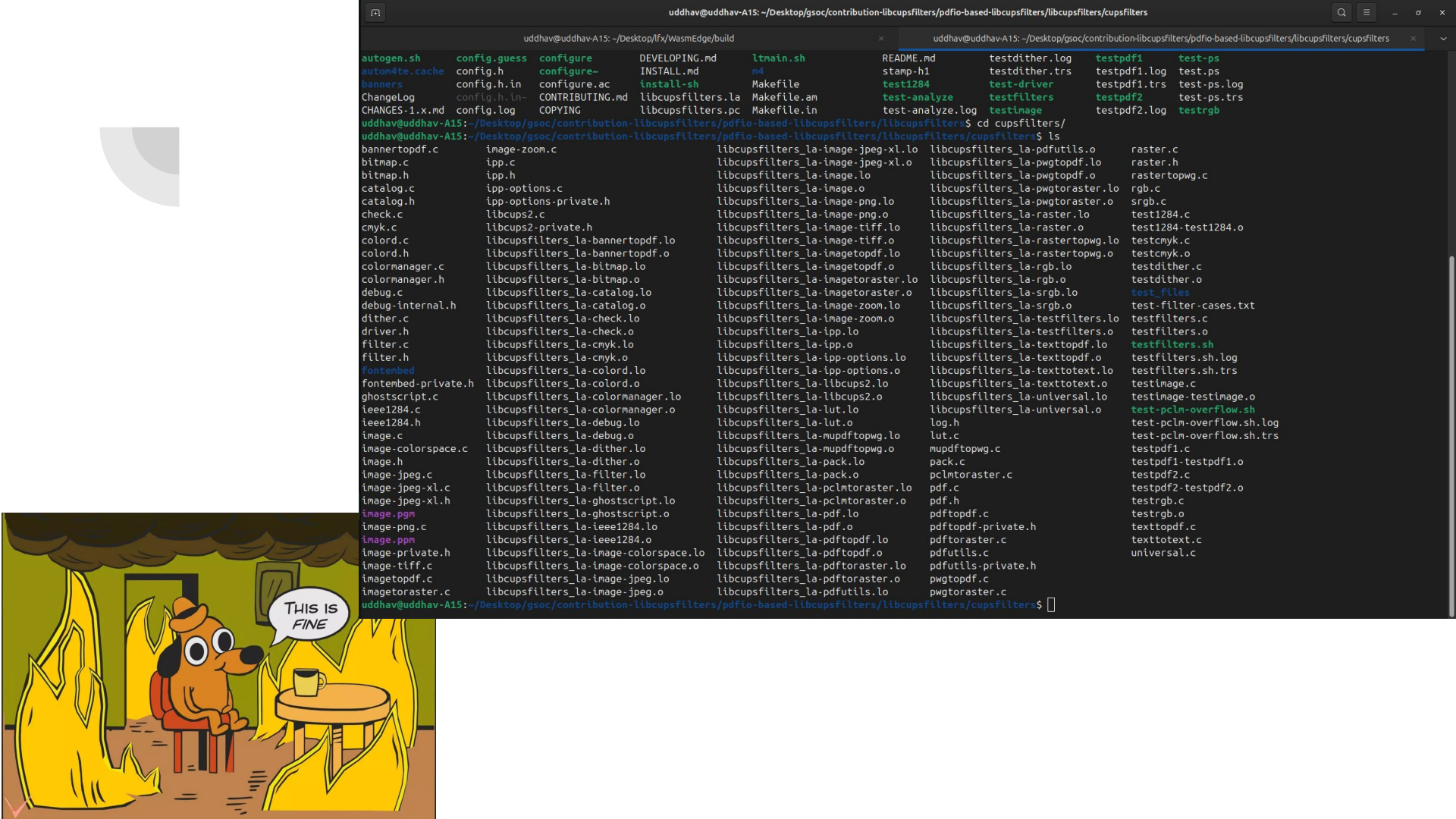
Who uses Open Source software?

Many people, and most companies! Most studies estimate that anywhere from 78% to 98% of companies use open source software.

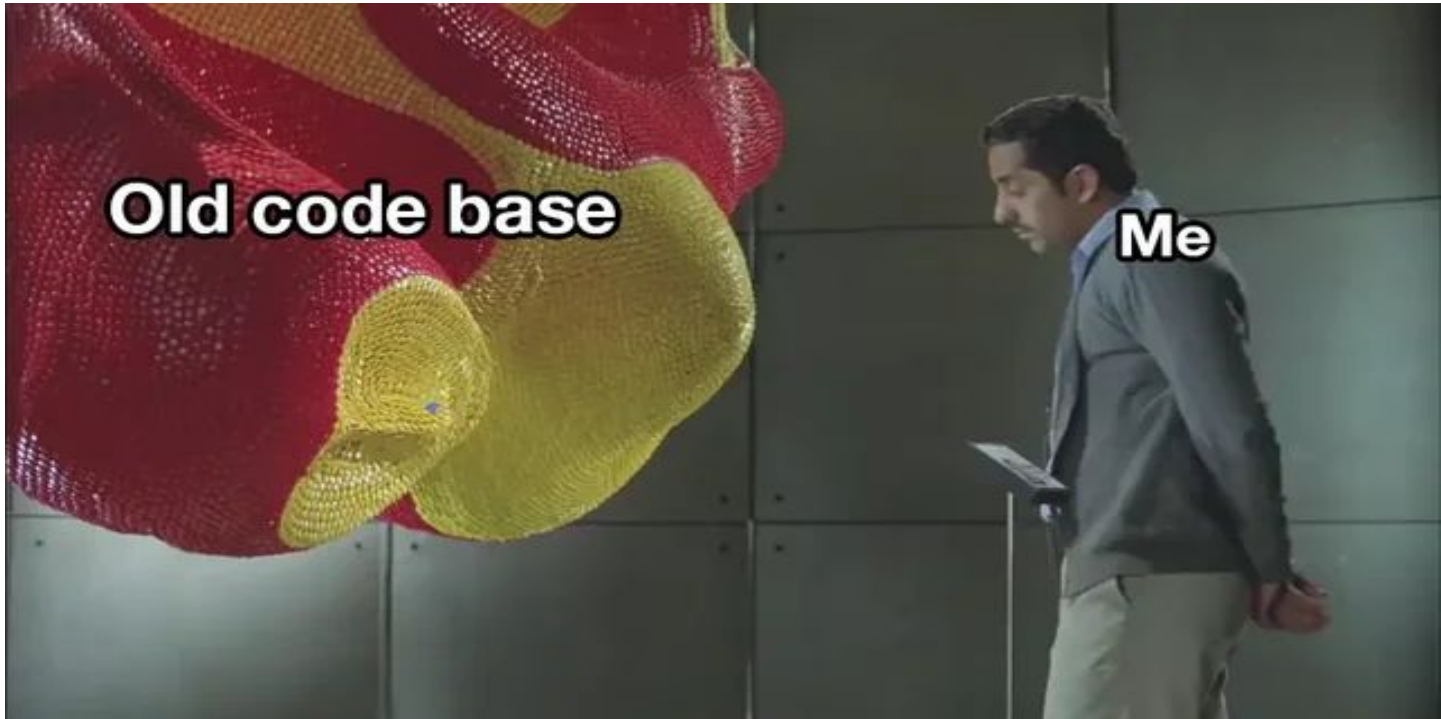




My Open Source journey



My Open Source Journey



Merged

Update in documentation #78
michaelrsweet merged 11 commits into michaelrsweet:master from uddhavphatak:master on Oct 26, 2024

uddhavphatak commented on Oct 14, 2024Contributor ...

Basics of PDF File have been added. It mainly includes the following:

- Understanding PDF Files:
 - A small PDF File: an example pdf file
 - Header
 - Body
 - Cross-Reference Table
 - Trailer
 - How a PDF File is Read
 - How a PDF File is Written

uddhavphatak added 7 commits 2 years ago

- Update_pdfio.md [diff] Verified 3de47ea
- Update_pdfio.md [diff] Verified eb5be57
- Update_pdfio.md [diff] Verified f5d40a3
- Update_pdfio.md [diff] Verified 2cadfd8
- Update_pdfio.md [diff] Verified 853fa4f
- Update_pdfio.md [diff] Verified df1964f
- Update_pdfio.md [diff] Verified 2d2a712

michaelrsweet requested changes on Oct 15, 2024View reviewed changes

michaelrsweet left a commentOwner ...

A really good start!

Reviewers

michaelrsweet ✓

Assignees

michaelrsweet

Labels

documentation

Projects

None yet

Milestone

Stable

Development

Successfully merging this pull request may close these issues.

None yet

2 participants

Replace QPDF by PDFio as PDF manipulation library in libcupsfilters #71

New issue

Merged tillkampeter merged 21 commits into OpenPrinting:master from uddhavphatak:pdfio-implement on Oct 1, 2025

Conversation 6 Commits 21 Checks 1 Files changed 51 +6,811 -6,428



uddhavphatak commented on Nov 16, 2024 • edited

Contributor

As the libcupsfilters library is principally written in regular C and not C++ due to the issues which would occur due to use of C++. But libcupsfilters still depend on one library which is written in C++, QPDF, a library for manipulation of PDF files. We need to replace this dependency on C++, with another library PDFio. This is a PDF handling and manipulation library, as QPDF is, but it is fully written in standard, regular C, not in C++.



tillkampeter commented on Nov 16, 2024

Member

There is still one single C++ source file: `cupsfilters/pdfstoraster.cxx`. It is not from a QPDF dependency, it is for the use of Poppler (from the C++ library libpoppler). It can be skipped via the `./configure` call with appropriate command line parameters and so we should be able to get a pure C libcupsfilters now. We will still need `pdfstoraster` as there are some printers with buggy PostScript interpreters which do not work with Ghostscript's PostScript output (`ps2write` output device). A way to eliminate C++ here would be to call a command line tool of Poppler which does the PostScript rendering.

Another point is the naming of the files you have created. Could you all rename them removing the `c-` in the beginning? We do not need it, as they have the `.c` extension and not `.cxx` any more.



tillkampeter commented on Nov 16, 2024

Member

By the way, your work has passed the included build and CI tests.

Could you add further test cases to the file `cupsfilters/test-filter-cases.txt` to exercise your changes? Note that if you need extra input files for that you need to add them to the cupsfilters source repository, and that they need to be under a free software license.

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

3 participants



0 errors
after merging
large codebase



realizing you
forgot to turn "build
automatically" on





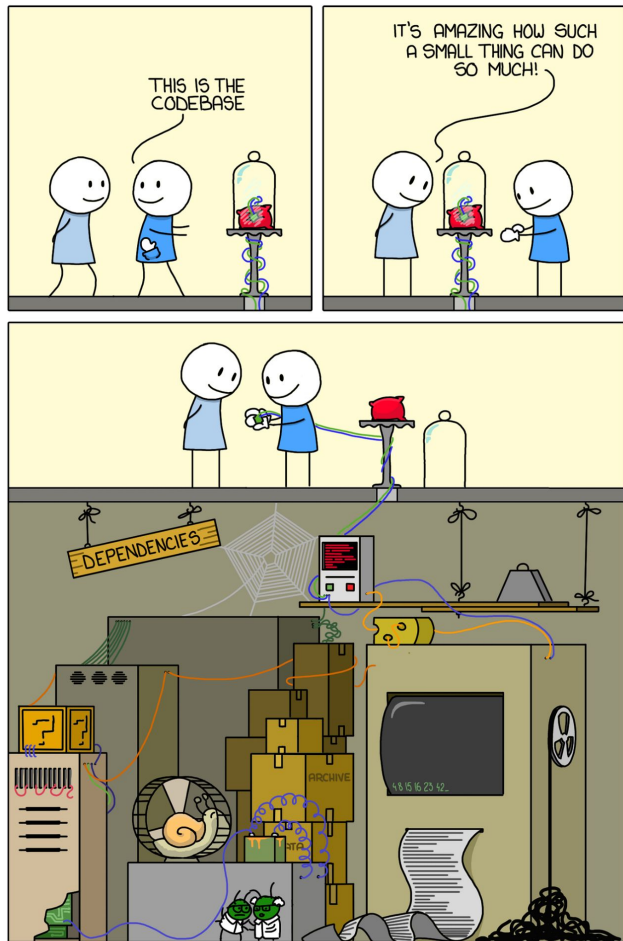
How Open Source changed me

- Learned to code
- Increased confidence
- Experienced collaborating with others
- Became a better programmer

- Built something and created an impact
- Stood out amongst other job applicants
- Experienced joy and satisfaction



IMPLEMENTATION



DO NOT



Figuring out what to contribute exactly

- Find typos in the README or in code comments
- Improve wording in the README or in code comments
- Create the README if a project does not have one yet
- Search a project's "Issues" for ideas on what to contribute





How to make the contribution

1. Download the project onto your computer
2. Make the changes on your copy of the project
3. Create a “pull request” to add your contribution to the project

Thank you!

Uddhav Phatak

<https://www.linkedin.com/in/uddhavphatak>

@ThePhatak

