



GitHub Fundamentals

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Objectives

- Pull Requests
- Github Templates
- Github Releases / Tag
- Github Wikis
- Github Pages
- Github Actions
- Github Issues
- Github Advanced Search
- CI/CD
- Docker
- Git
- Markdown
- Microservices
- Free Software
- Open Source
- Use GitHub as your CV





GitHub in Numbers



71+ million Developers



200+ million Repositories



3+ million Organizations



72% Fortune 50





How did we arrived here?

Unix	1970	AT&T Bell Labs
GNU	1983	GNU Project
GCC	1987	GCC + Libs
GPL	1989	4 Freedoms
Linux Kernel	1991	Linux Kernel
Open Source	1998	Netscape
GIT	2005	BitKeeper
GitHub	2008	Logical Awesome LLC
	2021	





Free Software & Open Source



Richard Stallman



Bruce Perens



Eric Raymond





What does “**free software**” mean?

User has freedom to:

- **Run** the program as you wish, for any purpose.
- **Study** how the program works, and change it so it does your computing as you wish. Access to the source code is a precondition for this!
- **Redistribute** copies so you can help others.
- **Distribute** copies of your modified versions to others. Access to the source code is a precondition for this!





What does “**open source**” mean?

The software is:

- **Redistributed** for free.
- The source code should be **publicly available**.
- The software can be **modified and distributed** in a different format from the original software.
- The software should **not discriminate against persons or groups**.
- The software should **not restrict the usage of other software**.





Free software **vs** Open source

Free Software

Social movement.

Free software focus on the user's freedom to use the program, to modify it, and to share it.



Open source

Open source is a development methodology.

Open-source focus on the availability of the source code and the ability to modify and share it.





Is Public repository open source?

Public \neq Open Source

Anyone can view and fork your public project, but your work comes with no permissions.

What if you don't apply an open source license?

Everybody who contributes to your project also becomes an exclusive copyright holder of their work. That means nobody can use, copy, distribute, or modify their contributions – and that “nobody” includes you.

If you want others to use, distribute, modify, or contribute back to your project, you need to include an open source license.





What license to choose from?

- 0-clause BSD License (0BSD)
- 1-clause BSD License (BSD-1-Clause)
- 2-clause BSD License (BSD-2-Clause)
- 3-clause BSD License (BSD-3-Clause) <https://choosealicense.com/se>
- Academic Free License 3.0 (AFL-3.0)
- Adaptive Public License (APL-1.0)
- Apache Software License 1.1 (Apache-1.1) (superseded)
- Apache License 2.0 (Apache-2.0)
- Apple Public Source License (APSL-2.0)
- Artistic license 1.0 (Artistic-1.0) (superseded)
- Artistic License 2.0 (Artistic-2.0)
- Attribution Assurance License (AAL)
- Boost Software License (BSL-1.0)
- BSD License: See
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 - 2-clause BSD License
 - 1-clause BSD License
 - 0-clause BSD license
 - BSD-3-Clause-LBNL
- BSD+Patent (BSD-2-Clause-Patent)
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- CERN Open Hardware Licence Version 2 - Weakly Reciprocal
- CERN Open Hardware Licence Version 2 - Strongly Reciprocal
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- Common Development and Distribution License 1.0 (CDDL-1.0)
- Common Public Attribution License 1.0 (CPAL-1.0)
- Common Public License 1.0 (CPL-1.0) (superseded)
- Computer Associates Trusted Open Source License 1.1 (CATOSL-1.1)
- Cryptographic Autonomy License v.1.0 (CAL-1.0)
- CUA Office Public License Version 1.0 (CUA-OPL-1.0) (retired)
- Eclipse Public License 1.0 (EPL-1.0) (superseded)
- **Etc.**

100+

- **Etc.**
- Open Software License 3.0 (OSL-3.0)
- OpenLDAP Public License Version 2.8 (OLDAP-2.8)
- OSET Public License version 2.1
- PHP License 3.0 (PHP-3.0) (superseded)
- PHP License 3.01 (PHP-3.01)
- The PostgreSQL License (PostgreSQL)
- Python License (Python-2.0) (overall Python license)
- CNRI Python license (CNRI-Python) (CNRI portion of Python License)
- Q Public License (QPL-1.0)
- RealNetworks Public Source License V1.0 (RPSL-1.0)
- Reciprocal Public License, version 1.1 (RPL-1.1) (superseded)
- Reciprocal Public License 1.5 (RPL-1.5)
- Revised BSD Source Code Public License (RSCPL)
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- Sun Public License 1.0 (SPL-1.0)
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- Unicode Data Files and Software License
- The Unlicense
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- W3C License (W3C)
- wxWindows Library License (WXwindows)
- X.Net License (Xnet)
- Zero-Clause BSD (0BSD)
- Zope Public License 2.0 (ZPL-2.0)
- zlib/libpng license (Zlib)





What license to choose from?

<https://choosealicense.com>

<https://blog.usejournal.com/understanding-open-source-and-free-software-licensing-c0fa600106c9>





Change the license of my project?

**CHOOSE
WISELY !**

<https://opensource.guide/legal/#what-if-i-want-to-change-the-license-of-my-project>

