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Sheffield

Software licensing

Part of the FAIR² for Research Software training programme

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A photograph of a large, red brick Gothic-style building, likely a university building. The building features multiple towers and gables, with intricate stonework and arched windows. It is set against a clear blue sky. In the foreground, there are some trees and shrubs.

Overview:

1. **Copyright**- What it is and why it matters
2. **Licences** - Why they are essential, how to choose one and apply it
3. **Building on other people's work** - What special considerations you need to take with this



Disclaimer

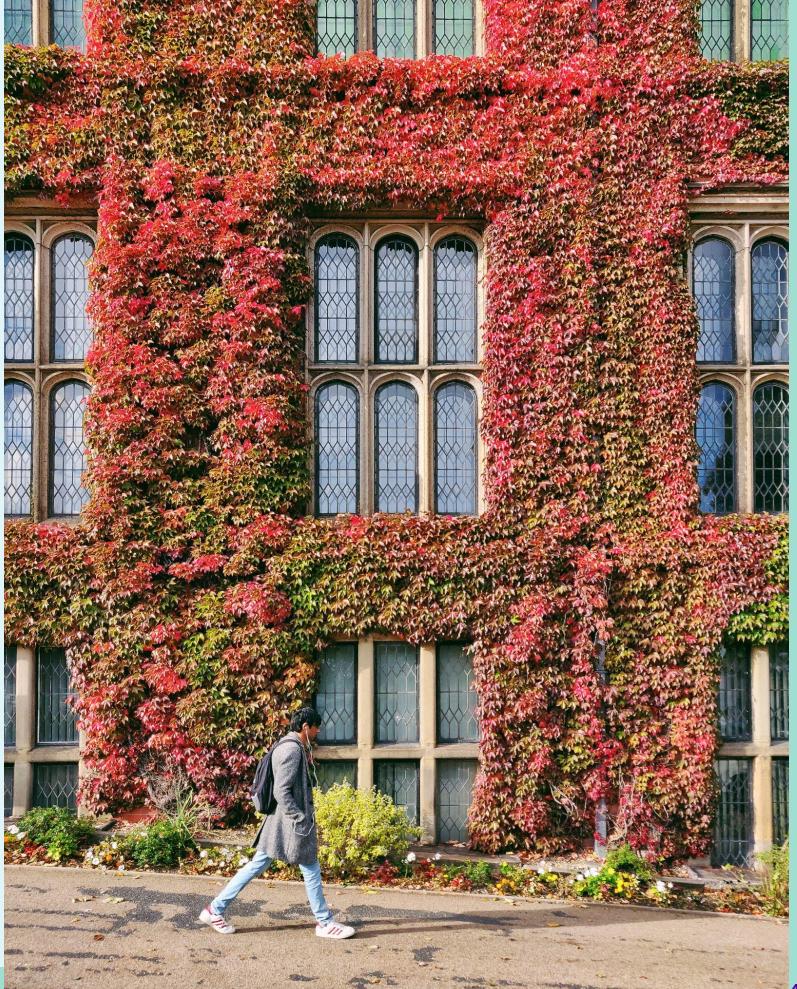
The information about copyright in this session is from the UK perspective. If you go on to work elsewhere in the world there may be different laws you need to be aware of.

Copyright is a legal right but nothing in this session should be taken as legal advice. If you have concerns about the legality of using other people's software or applying a licence to your own then you are strongly encouraged to seek advice from a qualified legal specialist in the area.

Copyright



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Copyright - works protected in the UK

What copyright protects in the UK:

- Original ‘authorial’ works
 - Literary works e.g. novels, reports, letters, poems, software/code
 - Dramatic works e.g. plays, dance choreography, mime
 - Musical works - this refers to written notation of some form
 - Artistic works e.g. paintings, drawings, photos, sculptures, models
- ‘Signal’ works
 - Films - recordings of any moving image
 - Sound recordings - of music, voices, natural sounds etc
 - Broadcasts - electronic transmissions (TV, radio)
- Typographic layout of published print editions e.g. books, newspapers



Copyright - restricted acts

Once copyright subsists in a work, what does that mean?

The copyright holder controls the **economic rights** in the work, and can stop others from doing any of the **restricted acts**:



- Reproducing in any material form, including electronically
- Distributing copies to the public
- Renting or lending the work to the public
- Performing, playing or showing the work to the public
- Communicating the work online to the public
- Adapting or creating derivative versions of the work

Economic rights can be - either wholly or partially - assigned, licensed, waived, and can also be inherited. Copyright in authorial works usually lasts for 70 years after the death of the author/creator.



Copyright - lawful use of copyright works

How can you lawfully use copyright works?

- Purchase of rights (assignment)
- Rely on a licence - various potential routes including:
 - Open licences e.g. [Creative Commons](#)
 - Use under blanket licensing schemes e.g. CLA, NLA, ERA, PPL PRS
 - Bespoke licences - obtain specific permission
- Rely on a legal exception that covers the intended use - these are 'permitted acts' balanced against the restricted acts



Copyright Summary

Summary

If you create something then you own the copyright to it and this means you control how others can use it

Just because something is free to read or view online does not mean it is free to reuse

You don't have to apply for copyright in the UK, it applies automatically when an output comes into existence

If you create something as part of your employment (or PhD) then your employer owns the copyright to it*

If you want to use someone else's work you need to respect their copyright

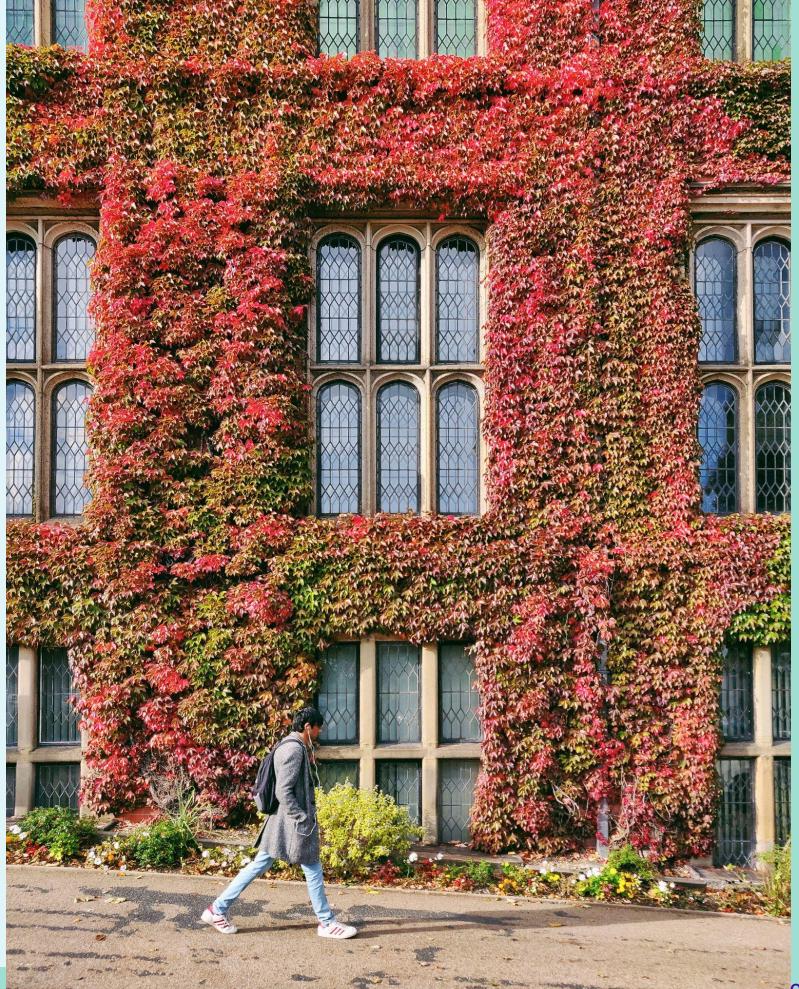
- “The University allows staff and students a right of autonomy over the copyright in scholarly works” *TUoS Intellectual Property Policy policy 2023*



Licences



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Why apply an open licence to your software?

- The purpose of applying an open licence is to ensure people know how they can use the work without requesting permission
- There is a disparity between accepted practice and legality - it's important to follow the legal route
- Open licences are standard and avoid the need for repeated negotiations
- Having an open licence does NOT preclude you from entering into a bespoke agreement



Types of open software licences

Permissive - these licences have very few restrictions on how others can use your code and there is no requirement that any derivatives have to be made openly available

Examples of permissive licences: BSD, MIT, BSL, Apache

Copyleft - these licences require that any derivative work from the software is released under the same licence as the original software, keeping derivatives openly available for others

Examples of copyleft licences: GNU GPL, Mozilla Public licence

<https://fossa.com/blog/all-about-permissive-licenses/>

<https://fossa.com/blog/all-about-copyleft-licenses/>

How to choose a software licence

Go to the site below and spend a few minutes exploring the licence options and there to see which ones you feel best suit what you want.

<https://choosealicense.com/>

Remember, if you are externally funded, or working with a 3rd party, you should check if your funder mandates a particular licence and respect their requirements.

Adding a licence to software

It's simple to add a licence to your software, all you need to do is create a LICENCE .md (or .txt) file on the top level of your folder structure (like a README).

In GitHub you can even create one directly in the repo, as we'll see. GitHub helps you along the way if you use this approach.

Important caveat - only apply a licence when you are certain which is the right one for your code. You can always apply one at a later point, but open licences are permanent so being thoughtful about them is very important

Adding a licence to Github

The screenshot shows the GitHub Dashboard interface. At the top right, there is a floating menu with several options: '+ New repository' (circled in red), 'Import repository', 'New codespace', 'New gist', 'New organization', and 'New project'. Below this, there's a 'Join GitHub Education!' section with a green 'Join GitHub Education' button. In the center, there's a 'Home' section with a 'Trending repositories' list. On the left, there's a sidebar with 'Top repositories' and a search bar. The main area has a light gray background.

Dashboard

Top repositories

New

Find a repository...

katefoneill/fair4rs_software_licensing

katefoneill/test

Join GitHub Education!

GitHub Education opens doors to new skills, tools, and a collaborative community eager to drive innovation. Join us and build a foundation for your future in technology.

Simple cloud hosting, built for developers

Copilot Turn natural language prompts into coding suggestions

Heroku Build, run, and operate applications entirely in the cloud.

Microsoft Azure Access to Microsoft Azure cloud services and learning resources

Join GitHub Education

Home

Trending repositories · See more

Tencent/Hunyuan3D-1

Python ⭐ 625

Abdenasser/neophony

Send feedback Filter

Type to search

+ New repository Import repository

New codespace New gist

New organization New project

Latest changes

- 16 hours ago Deprecation – Dependabot no longer supports Composer v1
- Yesterday EMU OIDC CAP support is now enhanced to protect web sessions [Public Preview]
- 2 days ago Notice of breaking changes for GitHub Actions
- 3 days ago Copilot subscription-based network routing is now enforced

View changelog →

Explore repositories

Adding a licence to Github

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Required fields are marked with an asterisk (*).

Repository template

No template

Start your repository with a template repository's contents.

Owner *



Repository name *

test1

test1 is available.

Great repository names are short and memorable. Need inspiration? How about [crispy-umbrella](#) ?

Description (optional)

Public

Anyone on the internet can see this repository. You choose who can commit.

Private

You choose who can see and commit to this repository.

Initialize this repository with:

Add a README file

This is where you can write a long description for your project. [Learn more about READMEs](#).

Add .gitignore

.gitignore template: None

Choose which files not to track from a list of templates. [Learn more about ignoring files](#).

Choose a license

License: None

A license tells others what they can and can't do with your code. [Learn more about licenses](#).

You are creating a private repository in your personal account.

Create repository

Adding a licence to Github

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Required fields are marked with an asterisk (*).

Repository template

No template ▾

Start your repository with a template repository's contents.

Owner *



katefoneill

Repository name *

test1

test1 is available.

License

Filter...

None

Apache License 2.0

GNU General Public
License v3.0

MIT License

BSD 2-Clause "Simplified"
License

BSD 3-Clause "New" or
"Revised" License

Boost Software License 1.0

Creative Commons Zero
v1.0 Universal

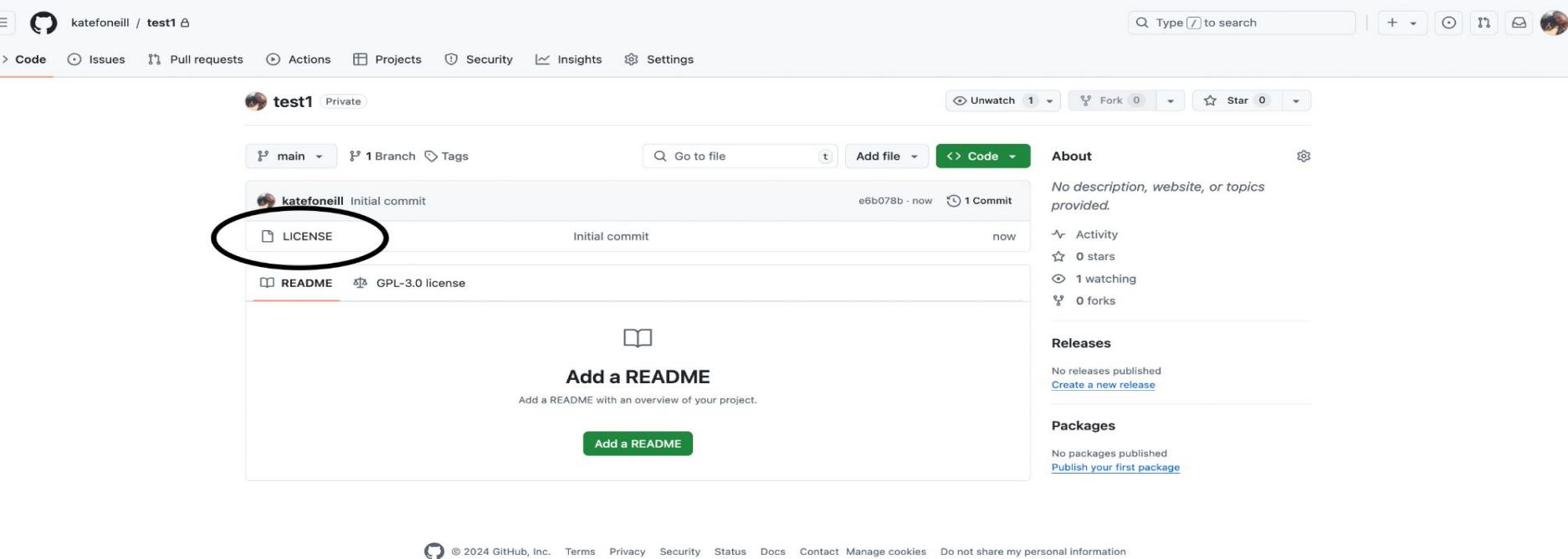
License: None ▾

A license tells others what they can and can't do with your code. [Learn more about licenses](#).

① You are creating a private repository in your personal account.

Create repository

Adding a licence to Github



The screenshot shows a GitHub repository page for a private repository named "test1". The main navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Security, Insights, and Settings. The repository has 1 branch and 0 tags. A commit from "katefoneill" titled "Initial commit" is shown, with the commit message "Initial commit" and timestamp "now". The commit hash is e6b078b. A "LICENSE" file is listed in the commit, which is highlighted with a large black oval. Below the commit, there are links for "README" and "GPL-3.0 license". To the right of the commit, there is an "About" section with the message "No description, website, or topics provided." It also shows activity metrics: 1 watching, 0 stars, and 0 forks. Below the commit, there is a section for "Add a README" with a button to "Add a README".

katefoneill / test1

Code Issues Pull requests Actions Projects Security Insights Settings

Unwatch 1 Fork 0 Star 0

main 1 Branch Tags

Go to file Add file Code

katefoneill Initial commit e6b078b · now 1 Commit

LICENSE

Initial commit now

README GPL-3.0 license

Add a README

About

No description, website, or topics provided.

Activity 0 stars 1 watching 0 forks

Releases

No releases published Create a new release

Packages

No packages published Publish your first package

© 2024 GitHub, Inc. Terms Privacy Security Status Docs Contact Manage cookies Do not share my personal information

Adding a licence to an existing repo in Github

katefoneill / fair4rs_software_licensing

Type to search

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

fair4rs_software_licensing Public
generated from [carpentries/workbench-template-rmd](#)

main 5 Branches Tags

Add file ▾ + Create new file
Upload files

About
FAIR4RS software licensing lesson repo
[katefoneill.github.io/fair4rs_software...](#)
[licensing](#) [data](#) [english](#) [software](#)
[lesson](#) [pre-alpha](#) [fair4rs](#)
[thecarpentries](#)

[Readme](#) [View license](#) [Code of conduct](#) [Cite this repository](#) [Activity](#)
0 stars 1 watching 0 forks

Releases
No releases published [Create a new release](#)

Packages
No packages published [Publish your first package](#)

Contributors 2
 actions-user

https://github.com/katefoneill/fair4rs_software_licensing/new/main

File	Description	Last Commit
.github/workflows	Initial commit	7 months ago
episodes	Initial commit	7 months ago
instructors	Initial commit	7 months ago
learners	Test change to pages	6 months ago
profiles	Initial commit	7 months ago
renv	Update renv	6 months ago
site	Initial commit	7 months ago
.gitignore	Initial commit	7 months ago
CITATION.cff	Another commit for intial setup	6 months ago
CODE_OF_CONDUCT.md	Initial commit with some FIXME updates and the patch ap...	6 months ago
CONTRIBUTING.md	Update CONTRIBUTING.md	6 months ago
README.md	Initial commit	7 months ago
config.yaml	Messing	6 months ago
fair4rs_software_licensing.Rproj	Initial commit with some FIXME updates and the patch ap...	6 months ago
index.md	Initial commit	7 months ago

Adding a licence to an existing repo in Github

The screenshot shows a GitHub repository interface. At the top, there's a navigation bar with links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the navigation bar, the repository name is 'katefoneill / fair4rs_software_licensing' and the branch is 'main'. A search bar contains the text 'Type ⌘ to search'. On the right side of the header, there are icons for creating a new file, committing changes, and other repository management options.

The main content area shows a file named 'licence' in the 'fair4rs_software_licensing' directory. The file has two tabs: 'Edit' (which is selected) and 'Preview'. Below the tabs, there's a message: 'Choose a license template' followed by a link 'Copilot 55% faster with GitHub Copilot'. The main body of the file editor is a text area with the placeholder 'Enter file contents here'. At the bottom of the editor, there are settings for 'Spaces' (dropdown), '2' (dropdown), and 'No wrap' (dropdown).

At the very bottom of the page, there's a note: 'Use ⌘ + Shift + m to toggle the tab key moving focus. Alternatively, use esc then tab to move to the next interactive element on the page.'

Adding a licence to an existing repo in Github

Screenshot of a GitHub repository page showing the "Add a license to your project" interface.

The top navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights (which is underlined), and Settings.

The main content area has a heading "Add a license to your project" and a sidebar on the left listing various license templates:

- Apache License 2.0
- GNU General Public License v3.0
- MIT License
- BSD 2-Clause "Simplified" License
- BSD 3-Clause "New" or "Revised" License
- Boost Software License 1.0
- Creative Commons Zero v1.0 Universal
- Eclipse Public License 2.0
- GNU Affero General Public License v3.0
- GNU General Public License v2.0
- GNU Lesser General Public License v2.1
- Mozilla Public License 2.0
- The Unlicense

The central area displays the message "Choose a license to add to your project" with a small icon above it. Below this, there are two lines of text:
Select a template on the left to get started.
Learn more about [which license best fits your project](#).



Adding a licence to an existing repo in Github

Screenshot of a GitHub repository page showing the process of adding a license.

The repository path is `katefoneill / fair4rs_software_licensing`.

The top navigation bar includes: Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights (highlighted), and Settings.

The search bar contains: Type to search.

The main content area is titled "Add a license to your project".

A sidebar on the left lists available licenses:

- Apache License 2.0
- GNU General Public License v3.0** (selected)
- MIT License
- BSD 2-Clause "Simplified" License
- BSD 3-Clause "New" or "Revised" License
- Boost Software License 1.0
- Creative Commons Zero v1.0 Universal
- Eclipse Public License 2.0
- GNU Affero General Public License v3.0
- GNU General Public License v2.0
- GNU Lesser General Public License v2.1
- Mozilla Public License 2.0
- The Unlicense

The selected license details are shown in the main panel:

Permissions

- ✓ Commercial use
- ✓ Modification
- ✓ Distribution
- ✓ Patent use
- ✓ Private use

Limitations

- ✗ Liability
- ✗ Warranty

Conditions

- ⓘ License and copyright notice
- ⓘ State changes
- ⓘ Disclose source
- ⓘ Same license

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

The license text for **GNU GENERAL PUBLIC LICENSE Version 3, 29 June 2007** is displayed:

Copyright (C) 2007 Free Software Foundation, Inc. <https://fsf.org/> Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

A call-to-action button: **Review and submit** (circled).

Adding a licence to an existing in Github

katefoneill / fair4rs_software_licensing

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Your license is ready. Please review it below and either commit it to the main branch or to a new branch.

LICENCE in main

Cancel changes Commit changes...

Edit Preview Choose a license template Code 55% faster with GitHub Copilot Spaces 2 No wrap

```
1      GNU GENERAL PUBLIC LICENSE
2      Version 3, 29 June 2007
3
4      Copyright (C) 2007 Free Software Foundation, Inc. <https://fsf.org/>
5      Everyone is permitted to copy and distribute verbatim copies
6      of this license document, but changing it is not allowed.
7
8          Preamble
9
10     The GNU General Public License is a free, copyleft license for
11     software and other kinds of works.
12
13     The licenses for most software and other practical works are designed
14     to take away your freedom to share and change the works. By contrast,
15     the GNU General Public License is intended to guarantee your freedom to
16     share and change all versions of a program—to make sure it remains free
17     software for all its users. We, the Free Software Foundation, use the
18     GNU General Public License for most of our software; it applies also to
19     any other work released this way by its authors. You can apply it to
20     your programs, too.
21
22     When we speak of free software, we are referring to freedom, not
23     price. Our General Public Licenses are designed to make sure that you
24     have the freedom to distribute copies of free software (and charge for
25     them if you wish), that you receive source code or can get it if you
26     want it, that you can change the software or use pieces of it in new
27     free programs, and that you know you can do these things.
28
29     To protect your rights, we need to prevent others from denying you
30     these rights or asking you to surrender the rights. Therefore, you have
31     certain responsibilities if you distribute copies of the software, or if
32     you modify it: responsibilities to respect the freedom of others.
33
34     For example, if you distribute copies of such a program, whether
```

Use Control + Shift + m to toggle the tab key moving focus. Alternatively, use esc then tab to move to the next interactive element on the page.

Other licences

There are many software licences, not all of which are useful for making your code FAIR.

Standard licences, like we've talked about so far, are easily understood, widely used and mean people are more likely to use your code (as they understand what they can and can't do with it)

[Examples of other licences](#) (please note there is adult language on this site)

Summary

A licence is essential if you want your software to be reused

Choosing a licence may take time and that's ok - only apply one when you're certain what's right for you and your code

Unusual or custom licences are rarely the right choice

Adding the licence name and a link to the licence in the README file as well as a separate licence file in the repository is best practice

Building on other people's work



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Third party code

If you're planning on using any code, models, tools or libraries used by others in your work then you need to know what licence they have applied to them

What if they don't have a licence? Don't assume you can use them, you will have to ask for permission from wherever wrote them

Make sure that whoever has posted what you want to use actually has the rights to do so...

Third party code

What can happen if you don't get your licensing right?

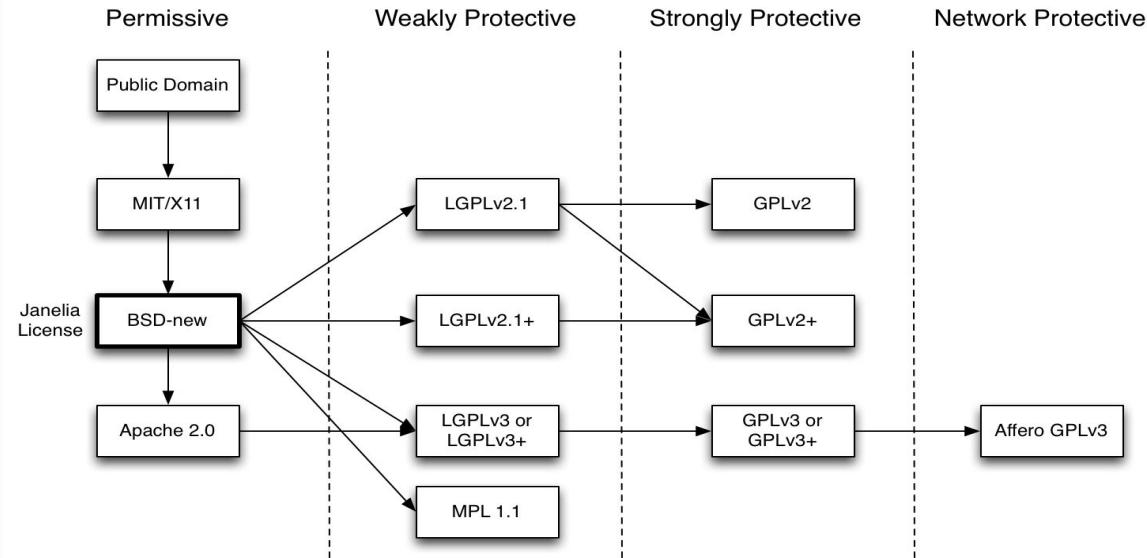
A modern horror story AKA What not to do

<https://arstechnica.com/gadgets/2024/10/winamp-really-whips-open-source-coders-into-frenzy-with-its-source-release/>

Third party code - licence compatibility

When you're licensing your own code you need to ensure whatever licence you choose is compatible with the third party code.

Open Source License Compatibility Chart



To see if software can be combined, start at their respective licenses and find a common box that can be reached by arrows from each license. Other possibilities exist if you are only using software as a library.

Copyright - questions & contact us



contact us:
copyright@sheffield.ac.uk

<https://www.sheffield.ac.uk/library/copyright>