

Mach dein Softwareprojekt nutzbar für andere!



DLR

Deutsches Zentrum
für Luft- und Raumfahrt
German Aerospace Center



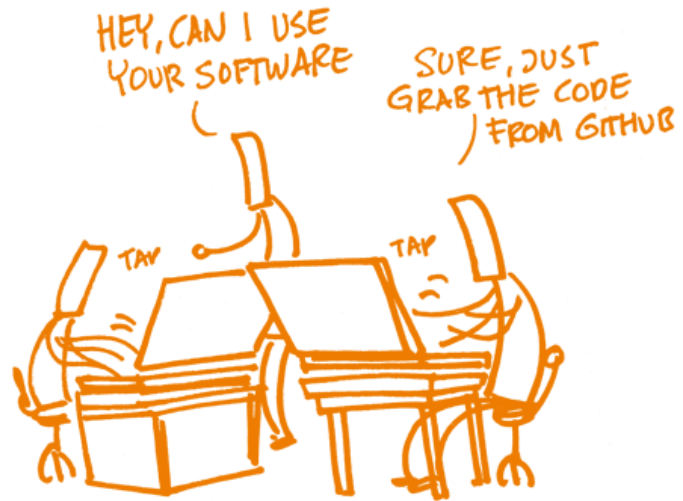
HIFIS

HELMHOLTZ
FEDERATED
IT SERVICES

OPEN SOURCE

VS

CLOSED SOURCE



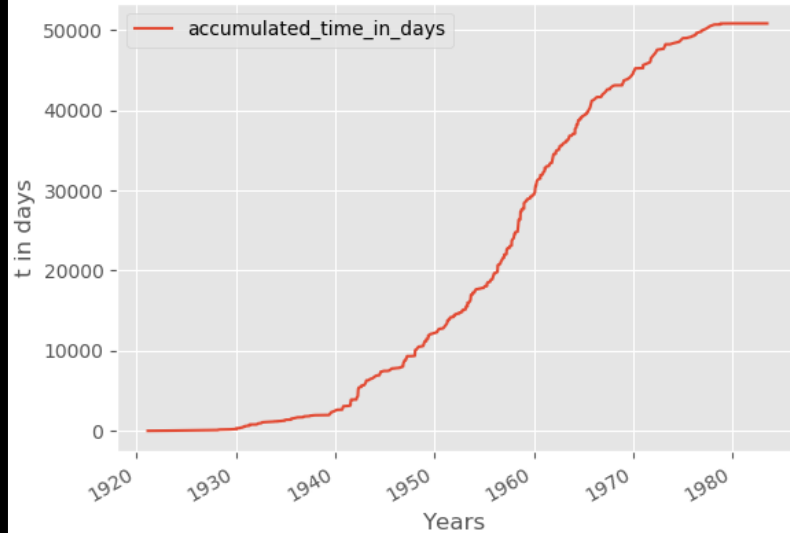
I wanna share my code, but what should I do to make it reusable?



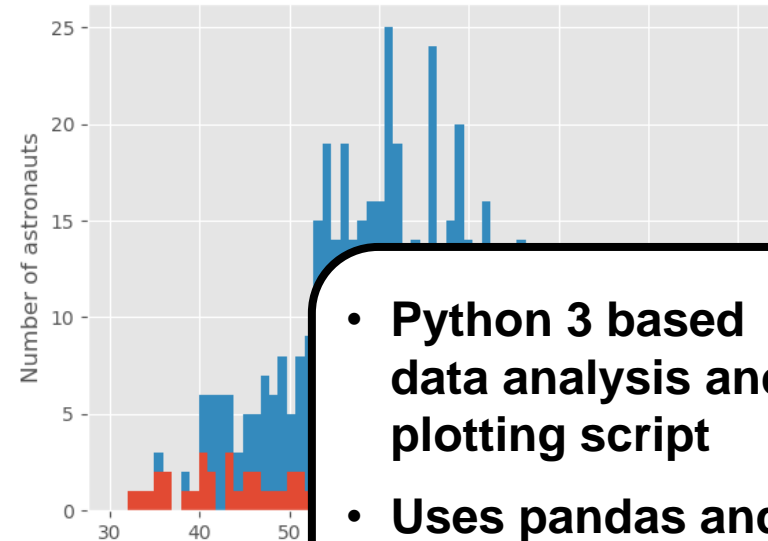
1. Put your code under version control
2. Make sure that your code is in a sharable state
3. Add essential documentation
4. Add a license file
5. Mark the stable version of your code
6. Make your code citable

Example: Astronaut Analysis

Total time humans have spend in space



Dead vs. Alive astronauts



- Python 3 based data analysis and plotting script
- Uses pandas and matplotlib 3

1. Put your code under version control



Keypoints

- Version control helps you to prepare the code for sharing.
- Make sure to put all relevant artifacts into the repository.
- **.gitignore** helps you to specify things that you do not want to share.

2. Make sure that your code is in a sharable state



Keypoints

- Make sure that others can (re-)**use** your code
- Do not share internals and secrets with your code
- Strive for understandable code

Changes:

- **PEP8 code style**
- **Code comments**
- **Relative file paths**
- **Functions**
- **Better directory structure**

3. Add essential documentation

README.md - The Front Page of Your Code

Keypoints

- Provide documentation for relevant target groups
- Add a README file as a minimum documentation artifact to your repository

Typical Structure:

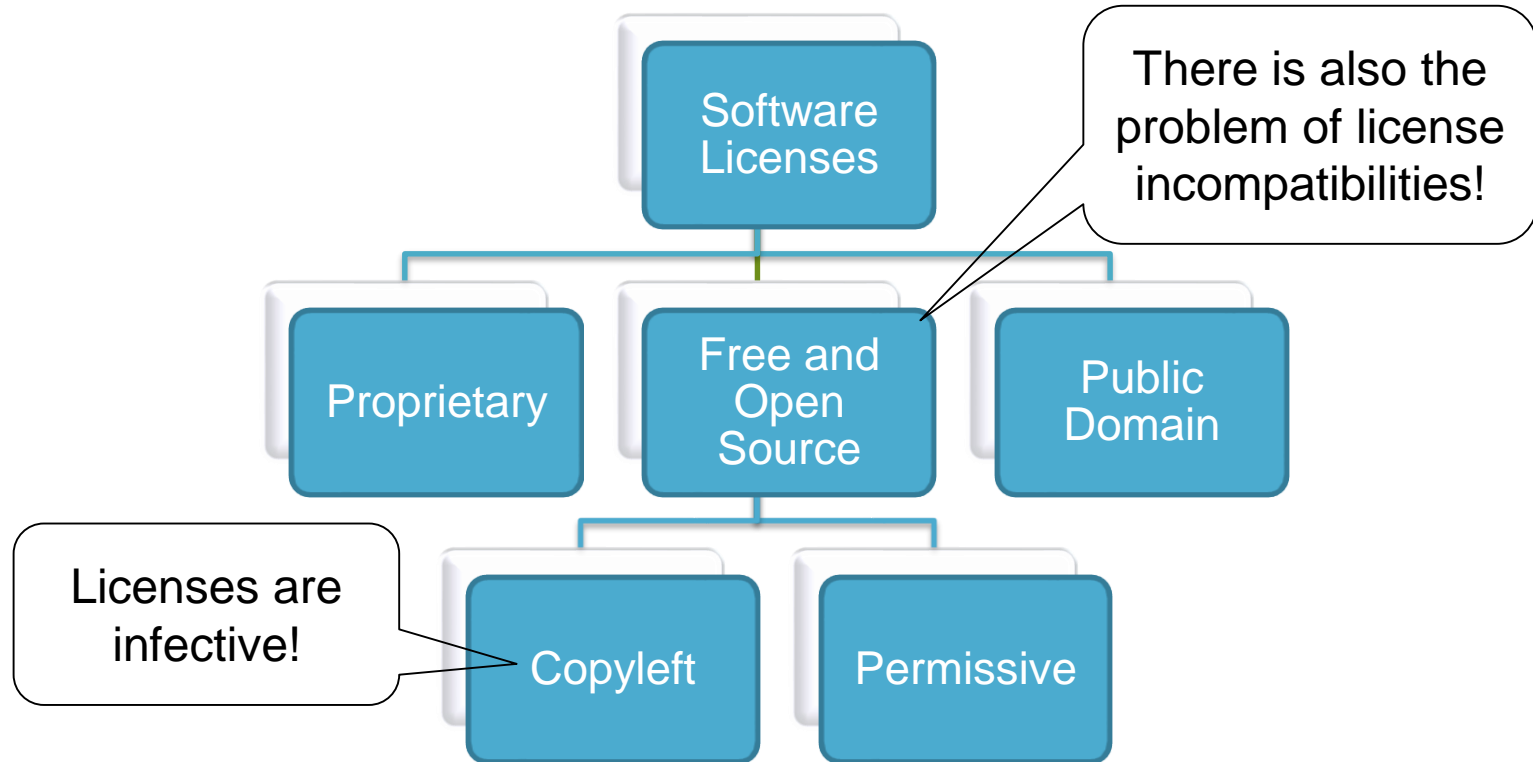
- **Software name**
- **Purpose**
- **Install**
- **Usage**
- **Contributing**
- **Citation Hint**
- **License**

4. Add a license

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- Excursus on (open source) licenses...

- Copyright:
 - protects the expression of an idea
 - grants exclusive rights to the copyright holder
- Everyone contributing to a software is considered a copyright holder of the software
 - All contributors are considered as copyright holders
 - A company paying an employed developer obtains most of the exclusive rights





4. Add a license

Keypoints

- Choose a license
- Prepare your code
 - Add license file(s) to your repository (=> LICENSES directory)
 - Add a copyright/license information to **all your files**
 - Provide a license and copyright holder hint
 - Document your third-party dependencies including their licenses

5. Mark the stable version of your code

Keypoints

- Mark usable, stable versions of your code using release numbers and tags
- Document important changes with the help of a changelog

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