Accessibility and Reproducibility

Best Practices for Writing Reproducible Code // part 5

Let's think about the future...

Will this repository still be here in five years?

Will my account?

Will GitHub?

Archiving the project

Zenodo has a sandbox environment!

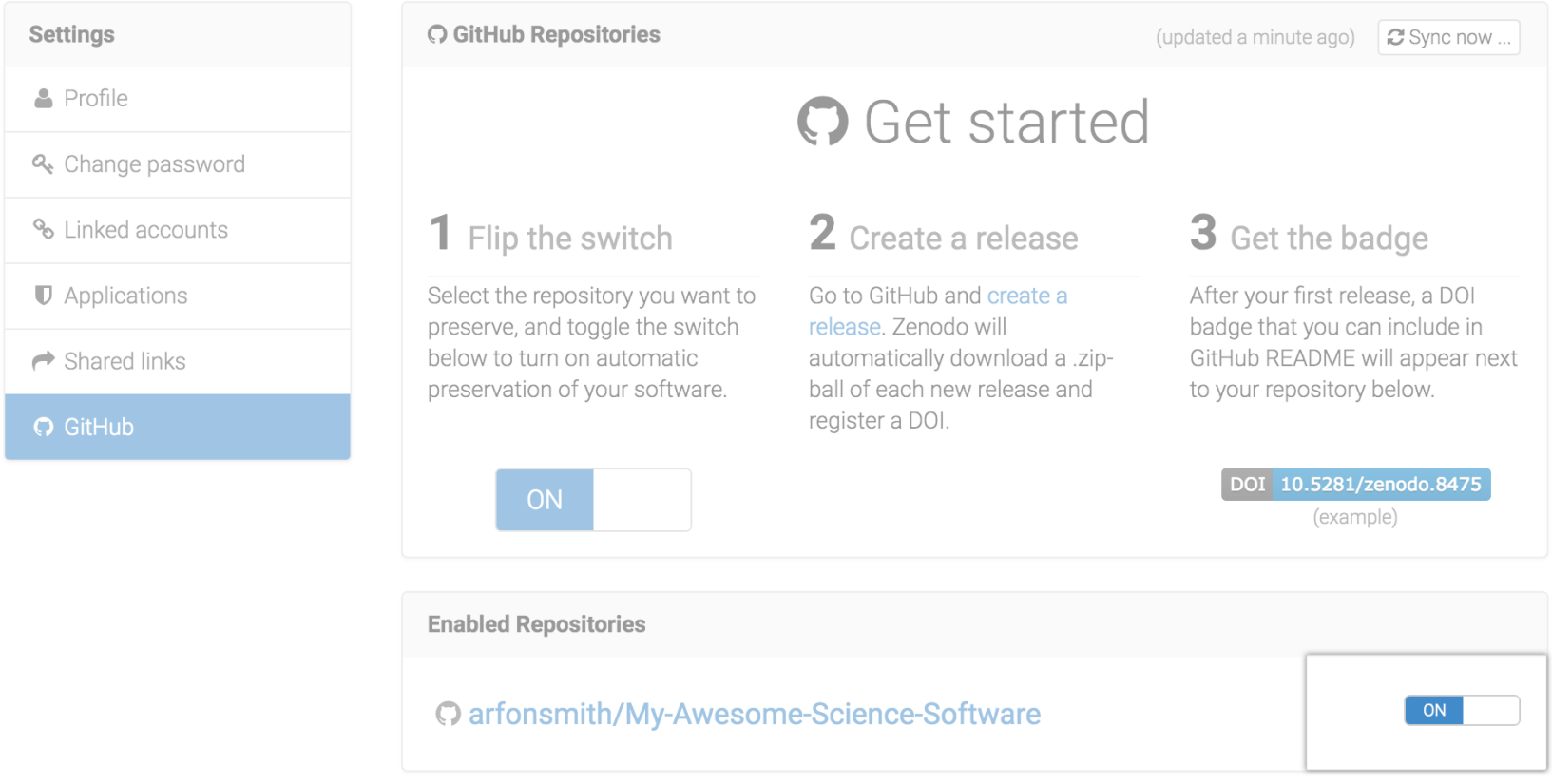
- Not the main data repository, but still functional.
- You will get an *actual* DOI, and your project will (probably?) not be deleted!
- Only do this following exercise if you are OK with your code staying online!
- You will not be able to do this with a private repository.

Zenodo and Github have a pipeline that makes your life easier! (*Check the full how-to on GitHub*.)

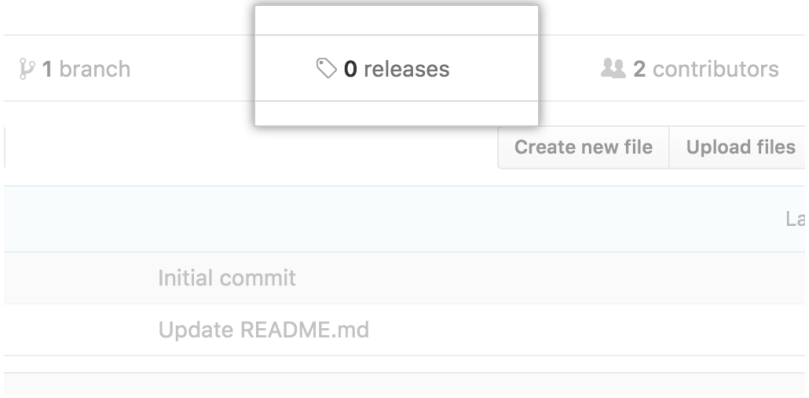
Your turn:

- Go to: sandbox.zenodo.org, and log in with GitHub. (If you do not have GitHub, simply sign up for a zenodo account; some of the coming steps you will need to do manually...)
- GitHub will then ask permission to give Zenodo access; click "Authorize application".

Select your repository



Release your project!



... and follow the workflow!

(Unsure about version number? Wait a slide! :-))

Semantic versioning

A version has three numbers: MAJOR.MINOR.PATCH

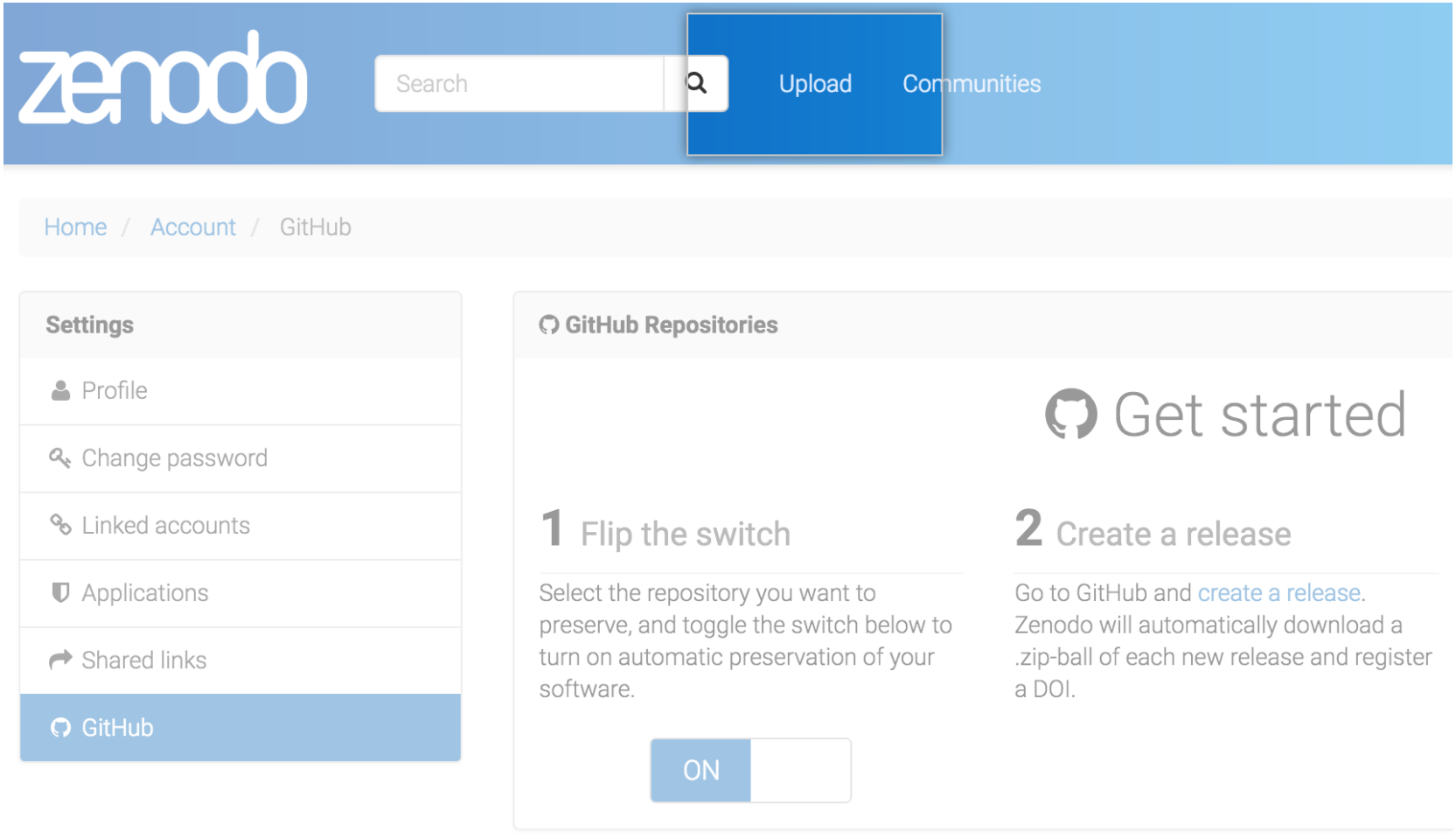
- MAJOR version denotes changes that alter the compatibility (i.e. someone using your functions may need to change their use for their code to still work),
- MINOR version adds functionality, but remains compatible
- PATCH version makes (compatible) bug fixes.

(If your bug fix changes compatibility, it is therefore a MAJOR version change!)

You can release today with v0.1.0

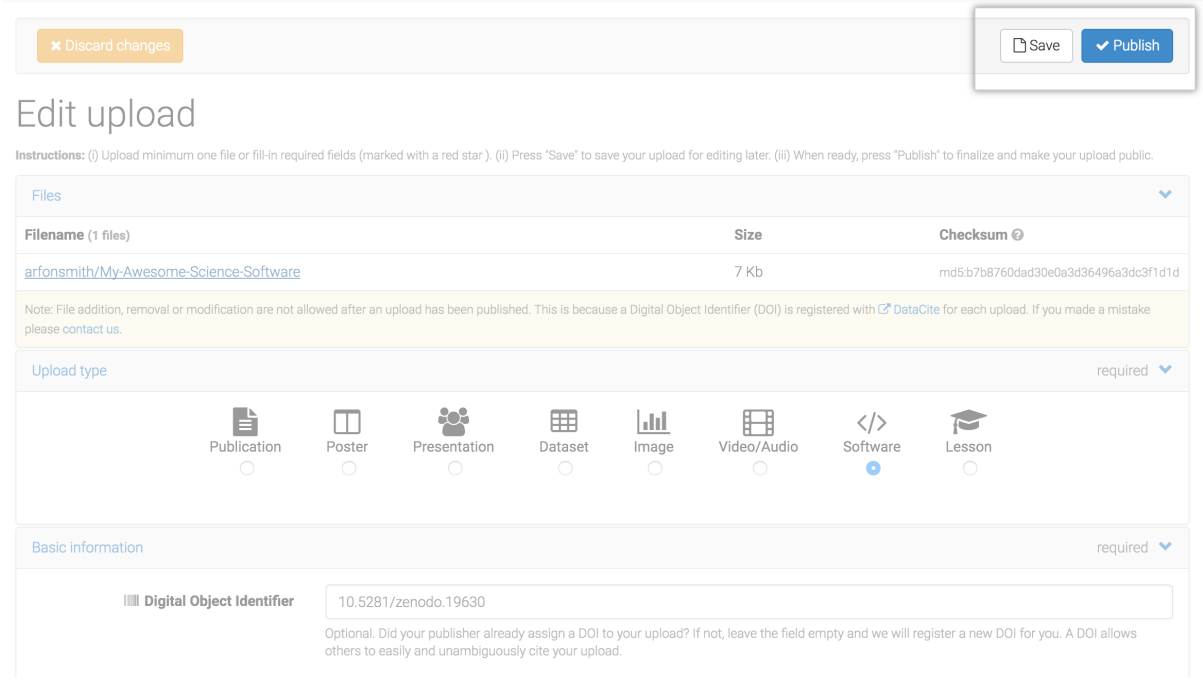
Check zenodo

Your code is now uploading to Zenodo: you can check it under the 'upload' tag:



Getting your DOI

- Add some final descriptions
- Click 'publish'
- Voilá!



Getting your DOI

Do you know your DOI?

As a final touch (only with real Zenodo!): you can take your DOI and place it as a badge at the top of your README.

```
[![DOI](https://zenodo.org/badge/doi/YOUR.DOI.svg)](http://dx.doi.org/YOUR.DOI)
```

This is not recommended with a Sandbox DOI, because sandbox projects are not permanent. The Sandbox DOI will not work like a normal one does!

Are you ready?

Let's exchange projects!

Please go to the second tab in the status chart tinyurl.com/repcochart, and fill out:

- your project name
- your project (github) URL
- your name
- the language in which the project was written

in the yellow columns.

NB this information will be deleted right after the course

Now, write your name in one of the blue columns behind a project you will reproduce.

We hope that everyone's repository will get a reproduction-attempt, so only add your name to the second column if there are no repos left (for you)!

As you reproduce, please give your colleague feedback!

Open an issue in your colleague's GitHub repository and copy/paste this feedback template