Exercise Introduction

This sheet covers additional exercise material for the presentation about publishing your own open source code.

Contents

Task 1: Hide your secrets (10 min)

Task Preparation

1. clone 2023-informatik-workshop-publish-code

2. create a venv inside this repository

3. activate the venv

4. install all dependencies

5. download the `bfg repo cleaner` here

Removing secrets

1. Remove the `ssh` keys from the history using the `bfg repo cleaner`

2. Find the password which was used for the request in `fetch-weather-data.py`

3. Remove this passphrase from the history using the `bfg repo cleaner`

Hints

- You can have a look at the commit history to find the passphrase which was accidentally commited.

Further Reading

- github: removing sensitive data from a repository

- bfg repo cleaner: examples

Task 2: CI Pipeline using Github Actions (30 min)

This task is about setting up a CI/CD pipeline for an open source project. You can do this for any project you like or simply for the 2023-informatik-workshop-publish-code repository.

Choose your project and fork it

After you have selected an open-source project that you want to set up a CI pipeline for, create a fork of the project. This will create a copy of the project in your account.

Create a new action for the forked project

Start by adding the quickstart github action to the project. This action provides some gathered information about this project.
The action could for example trigger the build process for the project, run the test suite of the project, calculate the test coverage, or check if the code adhears to the style guidelines of the project.

Create a CI pieline = workflow for the project you forked

The pipeline should contain multiple actions and could for example end with publishing the newest build artifact on GitHub. Review the build status and logs of the newly created workflow.

Make changes to the project and commit those changes validating the CI pipeline

These changes could be something small like for example refactoring some variables. Review the CI/CD process logs again to check if your workflow ran successfully.

Hints

- You can view the pipeline inside the 2023-informatik-workshop-publish-code repository.
- The workflows are stored inside the `project-dir/.github/workflows` directory

Further Reading

- github actions: quickstart