

Python

Backend Coding Challenge

Task: Newsletter-Application

Please implement a small *Python application*, that provides an API to maintain newsletter-subscriptions.

The application should fulfill the following requirements:

- HTTP-Endpoints to *create, confirm and delete* subscriptions
- Persistence-layer to store data (please use your preferred database-technology)
- The creation of subscriptions follows a *Double-Opt-In* process

The application does not need to send real Newsletter- or DOI-Mails.

Implementation & Hints

- You can use every Python Framework you want or even write the entire application from scratch, as long as you have good reasons for your choices.
- In case you are not using *PEP8 conventions* it's unusual, but ok. Please only give us an explanation for your choice.
- Structure your code with an eye on scalability & maintainability.
- Think about ways to separate the concerns of your application.
- Try to follow the SOLID-Principles.

- Think about the testability of your code.
- Please create a repository and deliver your code on Github or Gitlab.
- Have fun!

Evaluation Criteria

Our goal is to get an impression of the way you approach problems and their solutions:

- Code Quality
- API/Database-Design
- Performance
- BONUS: Are code quality tools in place?

Asking questions is good

In our team, we appreciate engineers spending time discussing with colleagues about the details of a problem as well as potential solutions. Usually, this leads to more efficient development and higher quality of the results.

That is why we are happy to help and will not penalize you for asking questions (just drop a line to tobias.rosenstock@project-a.com) .