

Python Engineer - Coding Challenge

Intro

Hello! We are very happy that you decided to work on our engineering coding challenge. The goal of the exercise is for us to get a better feeling of your problem solving skills, your understanding of the data you are working with, your coding style, tooling choice and the way you present your solution instead of coming up with a perfect solution. We expect you to spend roughly 4 hours on the challenge and no more than 6 hours as a cap. We suggest using Python for your solution, but feel free to justify your choices if you go for other tools.

Description

You are working in a disrupting digital company who wants to expand their offering to include financial data. Your team has identified some financial data sources which should be used. They have provided you with the extracted raw data and are asking you to load it into the database and write an API to interact with it.

Requirements

- Set up a containerized database server locally (e.g., postgres, mysql) and write SQL scripts to create the tables required for storing the data. You are free to choose a database suitable for this application and give reasons
- Load the data in the JSON file **financial_data.json** into the database. Choose a convenient schema and justify your choice
- Write an API to interact with the underlying database. Your API endpoints must perform basic CRUD operations. Two endpoints should be sufficient
- Write a Dockerfile to containerize your API solution

Deliverables

The completed challenge should contain a functioning implementation which you can either send us in a zip-file (please exclude all non-essential files/folders) or a private repository that you share with us.

Please provide documentation on how your solution can be tested as well as documentation of your solution. Please also detail possible future improvements and extensions of the solution to work at the scale of a few hundred thousand companies.

Conditions

We believe there is no one-size-fits-all technology. Good engineering is choosing the right tool for the right job. We encourage you to use any libraries you want as well as external data (should you need it). Please use Python as a programming language.

Please send your submission to Jonas at jonas.kernebeck@alpas.ai within 72 hours after you receive the challenge.

You are not allowed to publish your solution or this document without our explicit consent. For any questions that might arise, please contact us.

Good luck, and have fun!