

Technical Interview Specifications

Deadline: 08 February 2023 - 12H00

This task looks to understand your ability to structure a solution in Python, PHP, JavaScript or any programming language that you are familiar with. This task must be developed any programming language that you are familiar with and should have sufficient documentation for us to understand your solution, run it without asking you.

The goal is to build an extensible web-based workflow system. The workflow is driven by.

- Human input via an HTML form.

The process you are going to build loosely reflects some of the processes we use to get data from **excel** into our system and render visualisations. The **user** must enter a **customer** and the **information** captured as follows.

- **First Name**
- **Last Name**
- **Date of Birth**

The user is also going to **upload** an **excel file** with that has the customer's **financial income and expenses** in the last **12 months**. All user interaction should just be through super simple **HTML forms**. The user must upload the excel file when they capture the customer information. The system must **render a temporal graph** showing the customers income and expenditure for the last 12 months.

We will be considering how the workflows are composed, are they defined as some sort of schema?

There is no right answer to these questions, but architectural decisions and the reasoning behind them are important. It should be clear from reading the code and any comments or (lightweight) documentation how we would extend or change the workflow. This is what we are really looking for.

Restraints and considerations

- The system can have only one user, there is no need for login or user management.
- Data storage can be extremely simple, for example: a SQLite DB, or whatever is easiest.
- The UI can be extremely simple but well styled, just use HTML forms.
- Feel free to use any web framework, like flask, bottle, Django, Laravel, NodeJS, Expressor any other languages you are comfortable with.
- For submission:
 - Please use Gitlab, GitHub or Bitbucket public repo and share the link with us on the email provided below.
 - Please include a document explaining your solution in written form.
 - Document any assumptions made in the *readme* file.

Please use this data for your solution

Month	Income	Expenses
Jan	R19,770.00	R3,438.00
Feb	R29,926.00	R25,382.00
Mar	R21,500.00	R26,737.00
Apr	R29,023.00	R18,685.00
May	R24,486.00	R22,691.00
Jun	R29,245.00	R13,706.00
Jul	R28,474.00	R10,402.00
Aug	R25,398.00	R12,039.00
Sep	R33,953.00	R3,411.00
Oct	R30,650.00	R26,110.00
Nov	R20,149.00	R9,971.00
Dec	R30,613.00	R20,821.00

Reminder

Your submission must follow the convention below.

Submission email: recruitment@epftechhub.org

Subject: Graduate Programme 2023 – Technical Interview - [NAME & SURNAME]

Attachment: ID, CV, Qualification & Grade 12 Certificate

(Please name your files in the following manner... **name_surname_cv.pdf, name_surname_qualification.pdf** etc.)

Body: Your body should include your name, surname, email, contact number, address, and Link to your Repo.