

Backend Senior Engineer (Python) trial

Your objective is to perform a set of tasks described below. Please try to complete as much as possible within the trial time-frame, even if you do not finish all requirements.

Requirements

You are required to create a REST API for extracting content from user submitted URL as following:

1. User can submit any arbitrary url for a RSS feed
2. System should be able to parse the URL and extract links for all articles within
3. System returns list of articles titles as well as description in JSON format
4. System stores the parsed URLs, Titles and Description in sqlite database
5. System should never parse an RSS if it has been parsed in the last 10 minutes, instead it shall return last parsed results from the sqlite database
6. The end point should be protected using JWT (you can create free subscription on firebase or Auth0 to provide the required backend)

Note: We realize that the above is not a complete specification, and the expectation is for you to implement a solution based on the information you have. When unsure how to proceed, make a decision based on your instincts on what should be done based on your experience and show your skills.

Technical non functional requirements

You must use:

- Python 3.7 or later
- Use SQLAlchemy
- You can use any framework of choice (Flask, Fast API ..etc)

To be evaluated

1. Efficacy of your submission: fundamentally how well your solution is able to achieve the assignment objective and solve the stated problem.
2. Code quality:
 - a. Code modularity
 - b. Application organization across files and within each file - please ensure you follow the framework standards
 - c. Code documentation - balancing between self documenting code and comments
 - d. Unit testing
 - e. Exception handling where available and expected in the frameworks you're using

- f. Best Practices of Technology Applied
- 3. Technical
 - a. Clarity and completeness of the readme and design document
 - b. Functional completeness
 - c. Efficiency of communication flows between frontend and backend, if applicable
- 4. Satisfying the technical requirements

How to submit

- 1. Track your code from the time of creation till end using git
- 2. Make commits as much changes as you are doing
- 3. Publish your work to a github/gitlab on public repo
- 4. Send back the link to the repo