

This home test is should not be technically challenging, or scary, it's more of a way for you to demonstrate your coding style, technique, efficiency and reasoning.

To see your way of approaching the task and to have a baseline for a discussion during the next face to face session, we would like you to write a Python program that would satisfy the following requirements:

- Be an API answering "questions" with a json payload
- Call to an arbitrary external executable
- Handle custom messages for http status codes #400, #404, #500, #501, etc.
- Handle new requests while performing a blocking call
- Graceful shutdown
- Sample unit test(s)

An example of a sample program that would satisfy the above conditions:

- Make a call to an API with a json structure containing a folder name and parameters to list files from the folder.
- The parameters could define a filter or just be passed over to `ls`.
- To simulate a blocking call, make the code listing files in a directory sleep for 5 seconds.
- Log and respond with a custom message if a folder does not exist, you have no rights to read it or simply the URL one tries to reach is not reachable.
- If SIGINT is sent to the API serving script, then make sure you handle all outstanding requests before shutting down.

When you are ready, host your solution on a GitHub or any similar public service, so that we can clone it and run it locally. We might get back to you for feedback on the submitted code before the next session if there's something we would like you to clarify.

If you have any questions or are in need of a time extension to complete the task due to whatever reason just let me know!

Good luck!