

tretton37

Code Assignment

Backend

2023

■ Background

This code challenge is designed to find out more about **your knowledge in code quality, coding best practices, design patterns and written communication skills in the context of the language you chose.**

We ask you to approach this task as if you were **already a member of tretton37** and a part of a customer project.

Please read this description text carefully before you proceed and if anything is unclear, do not hesitate to contact us. We are here for you!

Before you start, we would like to thank you for your interest in **tretton37** and for the time you will spend doing this challenge. We sincerely hope to see you as part of our growing team.

Good Luck!



■ Delivery details

Submit your solution to a **public version control repository (such as GitHub)** with a **reasonable commit history that gives us some insight into how you work.**

Enclose a README with a short description of your product and the thoughts behind the design of your code. It should also contain instructions on how to install, build and run the application.

We do not expect (nor want) you to spend more than 3-6 hours on this challenge.

Once you are done, send us an email containing any notes or comments along with the link to your repo.

■ Your assignment

Create a console program in **your language of choice** that:

- Recursively traverses all pages on <https://books.toscrape.com/>
- Downloads and saves all files (pages, images...) to disk while keeping the file structure
- Shows some kind of progress information in the console

Definition of done

When your application has completed execution it should be possible to view the original page locally on your computer.

Constraints

The focus of the challenge is the actual scraping. It's OK to use external libraries for link extraction and DOM parsing. Or you can roll your own if you're feeling productive!

Good to know

On top of the basics, we do **appreciate** it if your program displays a good use of **asynchronicity, parallelism and threading.**

■ The Interview

If we proceed to the technical interview, we will discuss the way you chose to solve the code challenge, as well as factors like:

- Overall code quality
- Readability and maintainability
- Understanding of the requirements of the challenge
- Problem-solving and creativity
- Testing
- Quality aspects other than production code

If there are things that are unclear, do not hesitate to contact us and we will get back to you as soon as possible!

Good luck from everyone at tretton37!