# 1ε 37

# **Code Assignment**

Java

2022

## Code Assignment

### **Background**

This code assignment 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 Java development. The output of this assignment will be the base for evaluation.

We ask you to approach this task as if you were **already a member of the 13|37 family** 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 13|37 and for the time you will spend doing this assignment. We sincerely hope to see you as part of our growing family.

Good Luck!



## 1<sub>E</sub>|3<sub>7</sub>

#### Delivery details

Submit your solution to a public version control repository (such as git) 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 don't expect (nor want) you to spend more than 3-6 h on this assignment.

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

#### Your assignment

Create a console program in **Java** that can recursively traverse and download <a href="https://tretton37.com">https://tretton37.com</a> and save it to disk while keeping the online file structure. Show download progress in the console.

Focus on building a solid application that showcases your overall coding and Java skills, don't get caught up in technical details like html link extraction (a simple regex is totally fine).

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

During the technical evaluation we will discuss the way you chose to solve the code assignment, as well as factors like:

- → Overall code quality
- → Readability and maintainability
- → Understanding of the requirements of the assignment
- → Problem solving and creativity
- → Testing
- → Quality aspects other than production code
- → Polymorphism and object oriented aspects of the code (if applicable in the language)

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

# 15|37

Good luck from everyone at 13|37!