

1ε|37

Code Assignment

C#

2022

■ 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 C# development.**

We ask you to approach this task as if you were **already a member of 18|37** 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 **18|37** and for the time you will spend doing this assignment. 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 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 do not expect (nor want) you to spend more than 3-6 hours on this assignment.

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 **C#** that can recursively traverse and download <https://tretton37.com> 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 C# skills, do not 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 interview 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, do not hesitate to contact us and we will get back to you as soon as possible!

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Good luck from everyone at 13|37!