The Code Challenge:

We'd like you to write a simple web crawler in Golang.

Given a starting URL, the crawler should visit each URL it finds on the same domain. It should print each URL visited, and a list of links found on that page. The crawler should be limited to one subdomain – so when you start with https://parserdigital.com/, do not follow external links, for example to facebook.com or community.parserdigital.com.

We would like to see your own implementation of a web crawler. Please do not use frameworks like *scrappy* or *go-colly* which handle all the crawling behind the scenes or someone else's code. You are welcome to use libraries to handle things like HTML parsing.

Ideally, write it as you would a production piece of code. This exercise is not meant to show us whether you can write code – we are more interested in how you design software. This means that we care less about a fancy UI or sitemap format, and more about how your program is structured: the trade-offs you've made, what behaviour the program exhibits, and your use of concurrency, test coverage, and so on.

Once you have submitted your task, we will then schedule a session with an engineer, during which we all will discuss your implementation.

When you're ready, please submit your solution as a ZIP file.