

Software Engineer Coding Challenge

In this challenge, you are asked to design and implement a simple feature in Go, that we will discuss in the in-house interview. For your implementation, you have the freedom to add anything you see fit. You can create the project structure to your preference. There is no time limit for this, but we don't expect you to spend more than a couple of hours working on it. Finally, your solution should be as close to a working example as possible.

Background

Assume you are building a service to manage browser bookmarks. They are in tree structure - with folders and bookmarks. Each folder or bookmark is represented as an 'entry' in the schema below. Folders will contain entries, and bookmarks will have a url. There can be any level of nesting.

Bookmarks Schema

data:

- list: entry

entry:

- entries - list: entry
- name: str
- url: str - optional

The feature: Bookmark deletion from json data:

- Create a REST endpoint that receives a list of URLs - API Spec is up to you
- Retrieve bookmarks from a helper function (signature provided below). Bookmarks are in the form of an unsorted tree of arbitrary depth and breadth in the JSON schema is shown above.
- Remove all given URLs found in the list posted from the tree
- Store the tree back to the 'database' using the second helper function found below

Notes

- Retrieve the data using a function: retrieveBookmarks() BookmarkData
- Store the data using a function: storeBookmarks(data BookmarkData) error
- In order to keep this task brief, we are not interested in how you store the data. You can use static values, global variables, files, etc.
- Assume that tree fits in memory

Evaluation will be based on

- Approach to rest endpoint design and implementation
- Modularity
- Clean Code
- Testing
- Efficiency of the algorithm
- Scalability & Parallelism