

# Technical Assignment - Backend

## Truecaller 2022

Thanks for your interest in Truecaller! This document details the next part of the interview process, a chance for you to demonstrate your coding skills. The sections below contain instructions for what to implement, as well as guidelines for how to submit your assignment. Good luck!

### Matching Prefixes

Given a list of string prefixes of variable length, the assignment is to implement a method that takes a string as a parameter and returns the longest prefix that matches the input string. A prefix matches if the input string starts with that prefix.

The list of prefixes to match should be taken as a configuration by your solution. We've provided you with sample data that you can use.

### Sample Data

The attached file is a list of prefixes, one per line, that can be used to test your implementation. Please use these in your submission, but keep in mind that your solution should work with any list of prefixes.

### Instructions

Your task is to implement a method with the functionality defined above in Golang. **It is not sufficient for your solution to do a linear scan of the list of prefixes.** Feel free to pre-process the list of prefixes as you see fit.

What we hope to see in your submitted assignment is an ability to follow the specification and to solve a problem efficiently. We value readability and clear style in your code.

Your method should be submitted within a project, not as a single source file. Tests are a great way to show that your implementation works correctly. You may use a readme or comments to document your approach.

Bonus points if you can additionally demonstrate the use of goroutines in the above problem.

### Submission Guidelines

Please submit your assignment via email. Include all relevant files — code, tests, build files, but no binaries — in a compressed folder. You can use the format <initials>\_backend.tgz, as in "jbd\_backend.tgz", to name the attachment.