

Acele işe Şeytan GitHub karışır

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Kodla 22'

Trabzon

Hakkımda

- Software Engineer @PlanetScale
Öncesinde **GitHub**, **DigitalOcean**, **Koding**,
Pardus (Tübitak) vs ...
- Creator of **vim-go**
- **Go contributor**. Go paketleri (i.e: **color**,
structs, **hcl**, **gomodifytags**, etc..)
- **Kahve ve Tasarım sevdalısı**



Benim bir
sorunum var(*dı*)

1. Bash Script

(ne yanlış gidebilir ?)

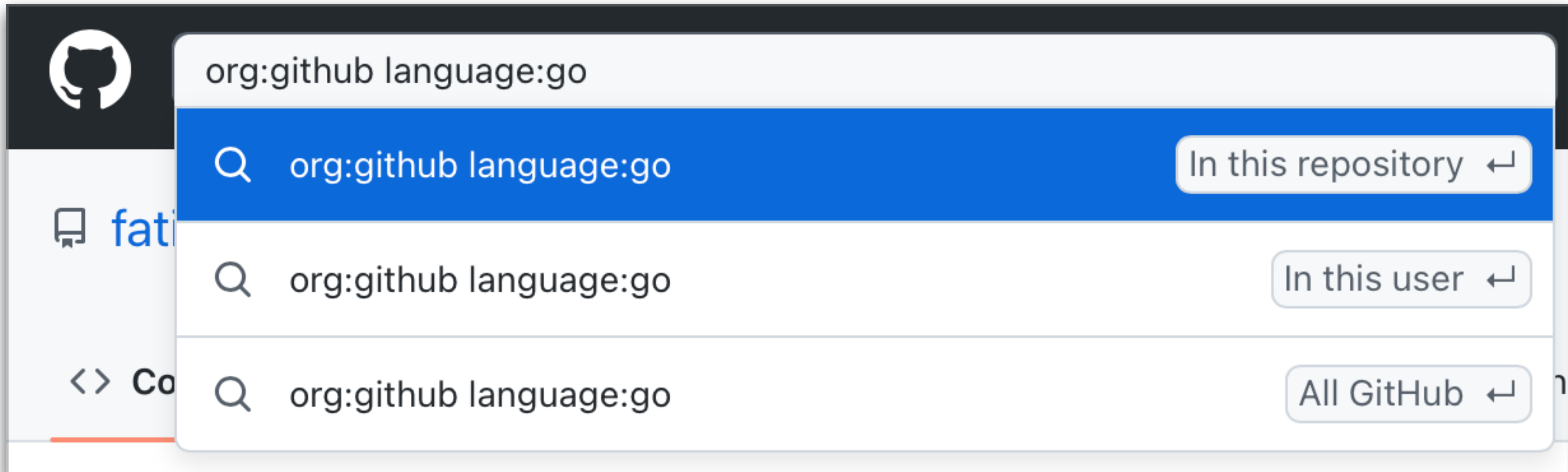
```
#!/usr/bin/env bash

repos=("structtag" "vim-go" "gomodifytags")

for repo in "${repos[@]}" ; do
    url="https://github.com/fatih/$repo"
    echo "cloning $url"
    git clone $url
done
```

2. GitHub API

GitHub Search API



- **org:github**
- **org:github language:ruby**
- **user:fatih repo:vim-go**
- **user:fatih language:go**

Go kullanalım

3. Concurrent

(eşzamanlı)

```
panic: GET https://api.github.com/search/
repositories?
per_page=50&q=org%3Agithub+language%3Ago:
403 API rate limit exceeded for 77.185.235.20.
```

(But here's the good news: Authenticated requests get a higher rate limit. Check out the documentation for more details.) [rate reset in 24s]

```
goroutine 1 [running]:
main.main()
    /Users/fatih/Code/kodla-talk/4-concurrent-
wait/main.go:23 +0x1b5
exit status 2
```

5. Authentication

6. Concurrent

(hâlâ çalışmıyor 🙄)

err: too many open files

7. Semaphore



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From Wikipedia, the free encyclopedia

This article is about the computer programming term. For other uses, see [Semaphore \(disambiguation\)](#).

In **computer science**, a **semaphore** is a **variable** or **abstract data type** used to control access to a common resource by multiple **threads** and avoid **critical section** problems in a **concurrent** system such as a **multitasking** operating system. Semaphores are a type of **synchronization primitives**. A trivial semaphore is a plain variable that is changed (for example, incremented or decremented, or toggled) depending on programmer-defined conditions.

A useful way to think of a semaphore as used in a real-world system is as a record of how many units of a particular resource are available, coupled with operations to adjust that record *safely* (i.e., to avoid [race conditions](#)) as units are acquired or become free, and, if necessary, wait until a unit of the resource becomes available.

Semaphores are a useful tool in the prevention of race conditions; however, their use is by no means a guarantee that a program is free from these problems. Semaphores which allow an arbitrary resource count are called **counting semaphores**, while semaphores which are restricted to the values 0 and 1 (or locked/unlocked, unavailable/available) are called **binary semaphores** and are used to implement [locks](#).

The semaphore concept was invented by Dutch computer scientist Edsger Dijkstra in 1962 or 1963,^[2] when Dijkstra and his team were developing an operating system for the Electrologica X8. That system eventually became known as THE multiprogramming system.

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In computer science, a **semaphore** is a **variable** or **abstract data type** used to control access to a common resource by multiple **threads** and avoid **critical section** problems in a **concurrent** system such as a **multitasking** operating system.

Semaphores are a type of **synchronization primitives**.

A trivial semaphore is a plain variable that is changed (for example, incremented or decremented, or toggled) depending on programmer-defined conditions.



Semaphore ("apparatus for signalling," from Greek *sema* "sign, signal" and *phoros* "bearer")
[1] is the use of an apparatus to create a visual
signal transmitted over distance.[2][3]

A semaphore can be performed with devices including: fire, lights, flags, sunlight and moving arms.

Semafor nedir?

- **Demiryollarında**, gündüzleri mekanik olarak kırmızı bir kolla, gece vakti kırmızı ışıkla işaret veren aygıt.
- İki **gemi** arasında ya da bir gemiyle kıyı istasyonu arasında haberleşmede kullanılan, üç kollu işaret sütunu.

8. Semaphore

(peki hataları ne yapacağız?)

9. Semgroup

(github.com/fatih/semgroup)

semgroup reference

semgroup provides synchronization and error propagation, for groups of goroutines working on subtasks of a common task. It uses a weighted semaphore implementation to make sure that only a number of maximum tasks can be run at any time.

Unlike golang.org/x/sync/errgroup, it doesn't return the first non-nil error, rather it accumulates all errors and returns a set of errors, allowing each task to fulfil their task.

Install

```
go get github.com/fatih/semgroup
```


10. İleri Seviye

(daha ne yapabiliriz ?)

Sonuç

Teşekkürler

Fatih Arslan



@fatih



@fatih