Distributed Systems & Blockchain
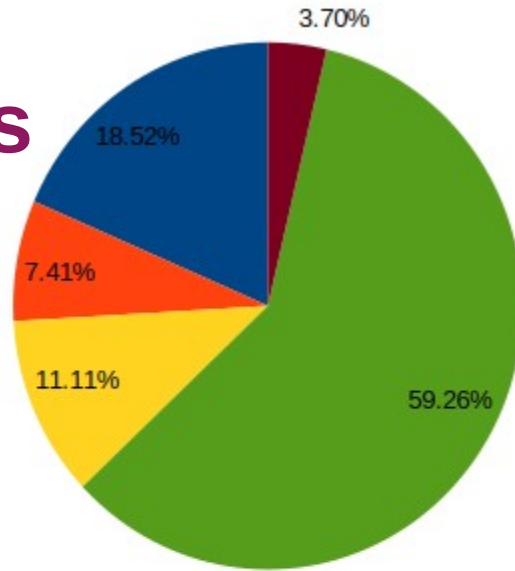
In the news

Thomas Bocek

04.06.2023

Distributed Systems & Blockchain in the News

- Announcement of the FS23 distributed systems challenge task winner

  - https://dsl.i.ost.ch/lect/fs23/

    1) Load balancing with scalable service

    2) Failover of a service instance

    3) Dockerized and Frontend connects via HTTP/3

    4) Persistant storage (storage does not need to be scalable, but you can build it scalable if you want)

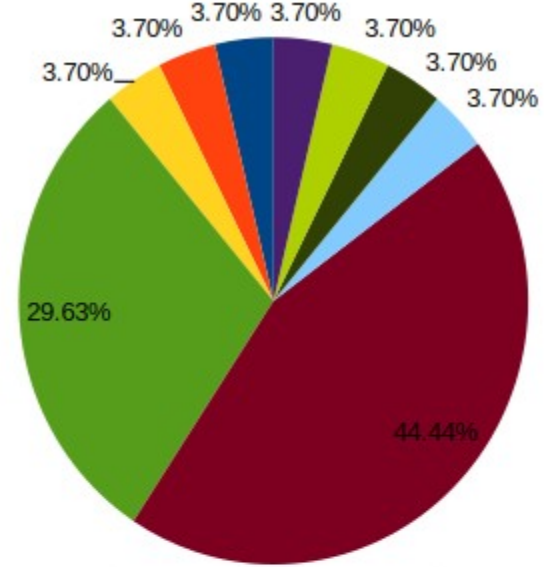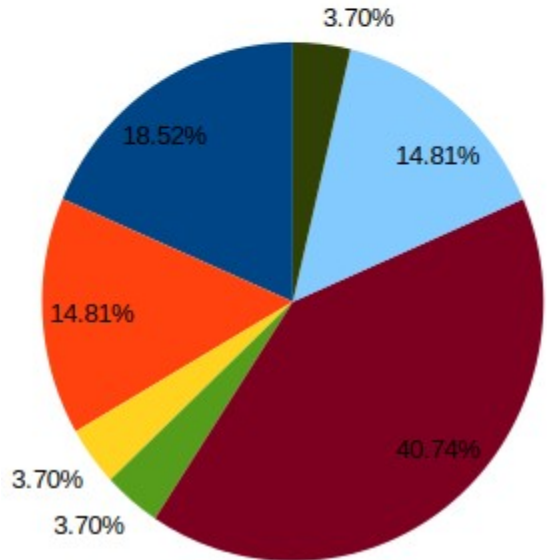   5) Use latest stable releases of chosen libraries and frameworks

Distributed Systems
Challenge Task FS 2023 Award

Award Price: ~2 **mBTC**
private key: xyz
public key: abc

AXELRA

Name

Dr. Thomas Bocek

public key   private key   OST - DSL

OST

Statistics

Load Balancer
- Caddy — 18.52%
- HAProxy — 7.41%
- Kubernetes — 11.11%
- Traefik — 59.26%
- YARP — 3.70%

Database
- Cassandra — 3.70%
- CockroachDB — 3.70%
- MariaDB — 3.70%
- MongoDB — 29.63%
- PostgreSQL — 44.44%
- S3 — 3.70%
- ScyllaDB — 3.70%
- SQLite — 3.70%
- Supabase — 3.70%

Backend
- .NET — 18.52%
- Golang — 14.81%
- Java/Spring Boot — 3.70%
- Kotlin/Spring Boot — 3.70%
- Node.js — 40.74%
- Python — 14.81%
- Ruby — 3.70%

Frontend
- AlpineJS — 3.70%
- Angular — 3.70%
- HTML — 3.70%
- JavaScript — 11.11%
- React — 18.52%
- SSR — 33.33%
- Svelte — 3.70%
- TypeScript — 3.70%
- Vue — 18.52%

OSI
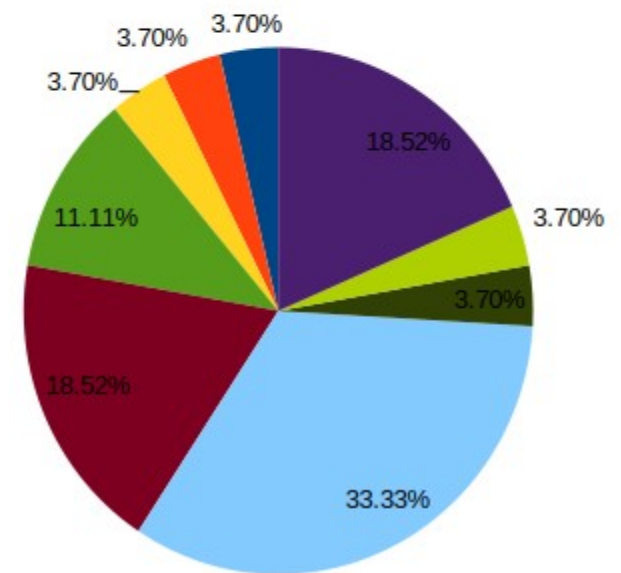
Distributed Systems - Challenge Task FS 2023 Winner

- Winner Group

- Gotography

  - Manuel Metzler

  - Reto Furrer

  - Sascha Häring

- Tagging of images using machine learning with PhotoPrism – self-hosted

- Kubernetes – self-hosted with MetalLB

- ScyllaDB – storage is fault-tolerant
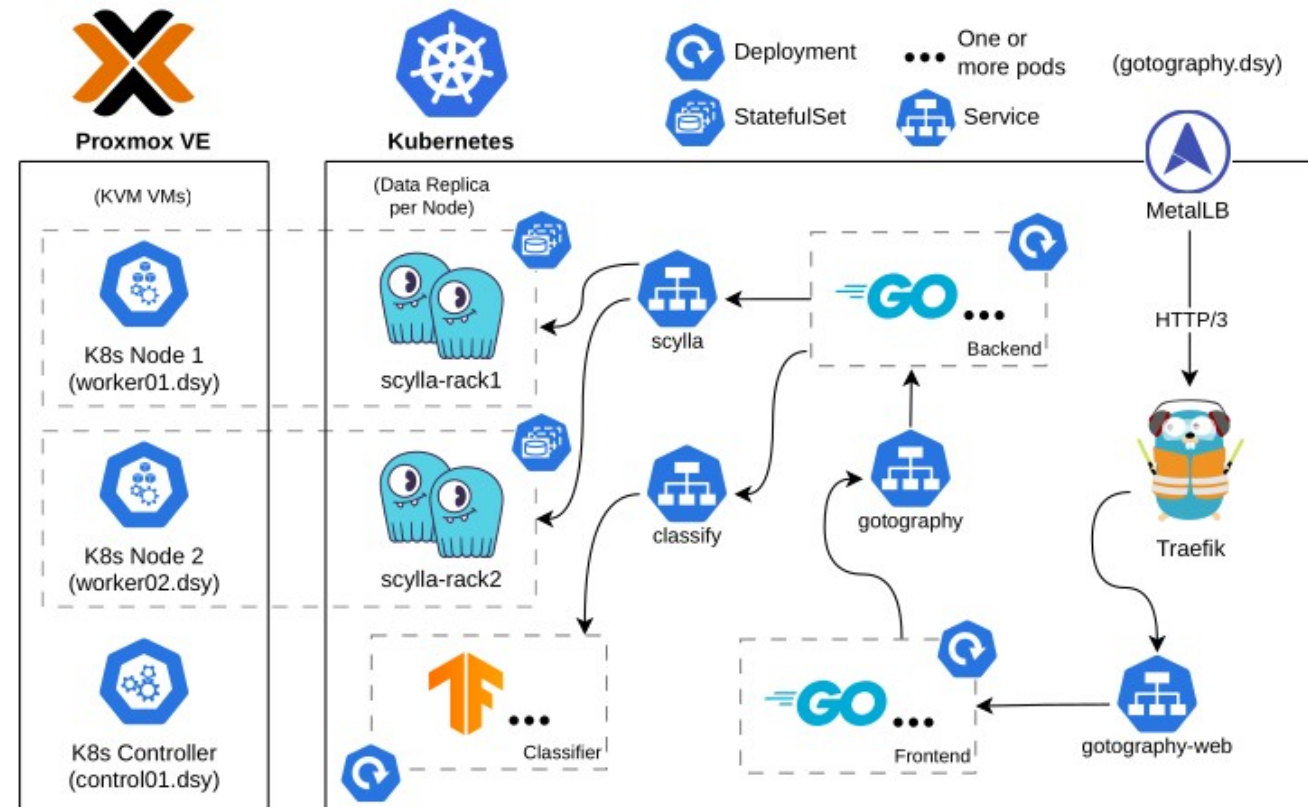
Source: Gotography Handin, M. Metzler, R. Furrer, S.Häring, June 2023