

Praca z platformą Kubernetes

Wojciech Wrzalik, SAP
26.04.2022

PUBLIC



Agenda



SAP Labs Poland

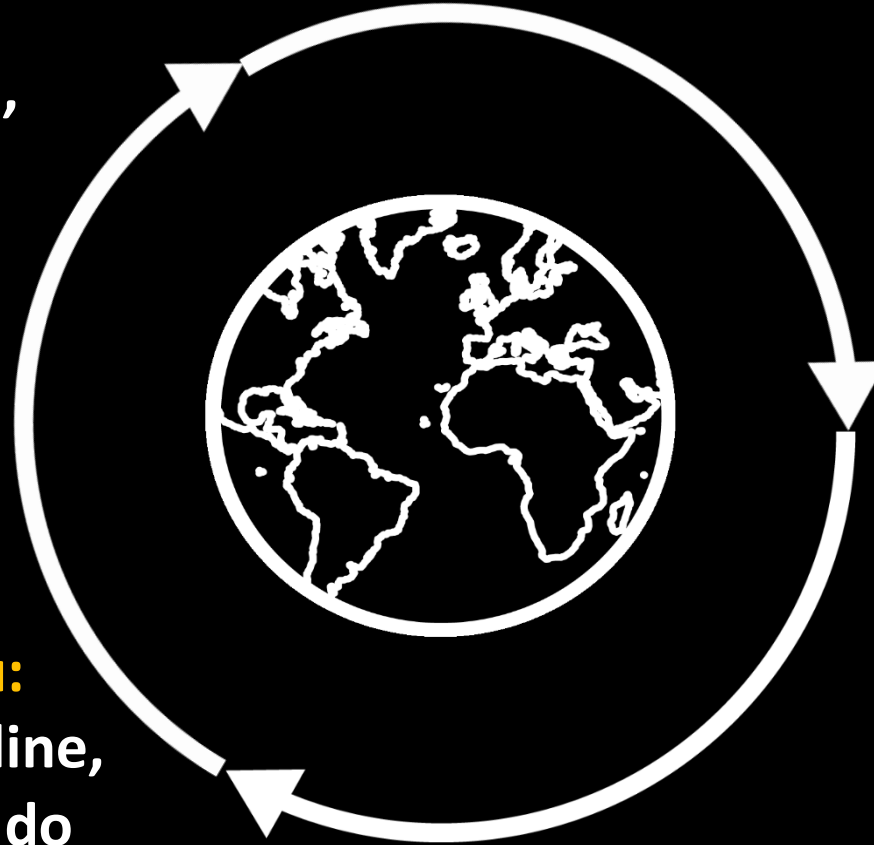
Różnorodność domen

E-commerce, social commerce, cloud platform, open source,...

Development: Go, Java, Angular, Cloud Native solutions, ...

Możliwość nauki i rozwoju:

Platformy do edukacji on-line, certyfikacje, łatwy dostęp do ekspertów na całym świecie



> **350** pracowników

Różnorodność specjalizacji

Product teams, project teams, innovation projects teams, support teams

Jedno z 21 centrów
SAP's Labs Network

HyC '22

HAYO
CKUR
CAREER



#SAPLabsPL

Zarejestruj się na zajęcia:

fb.com/Hack.your.Career

Śledź nasz  aby poznać
szczegóły!



SAP Labs Poland

12
04 '22

MICHAŁ DRZEWIECKI,
JAN MĘDREK

**KICKSTART YOUR
CAREER - JAK DZIAŁA
PROGRAM STAŻOWY
TEAM HACK W
SAP LABS POLAND**

26
04 '22

WOJCIECH WRZALIK
**PRACA Z
PLATFORMĄ
KUBERNETES**

28
04 '22

MICHAŁ DRZEWIECKI,
JAN MĘDREK

**TEAM HACK -
SPEED INTERVIEW**

01
06 '22

DOMINIKA BIEG,
ŁUKASZ ŁUCZYNOWICZ
**SCRUM MASTER -
CZYLI KTO?**

Goal

- Basic information about Kubernetes
- Inspired by Kubernetes docs
- Useful for Hack Team

Presumptions


- Kubectl installed
- Docker & k3d
- Helm
- Bash



https://github.com/HackYourCareer/202204_working-with-kubernetes.git

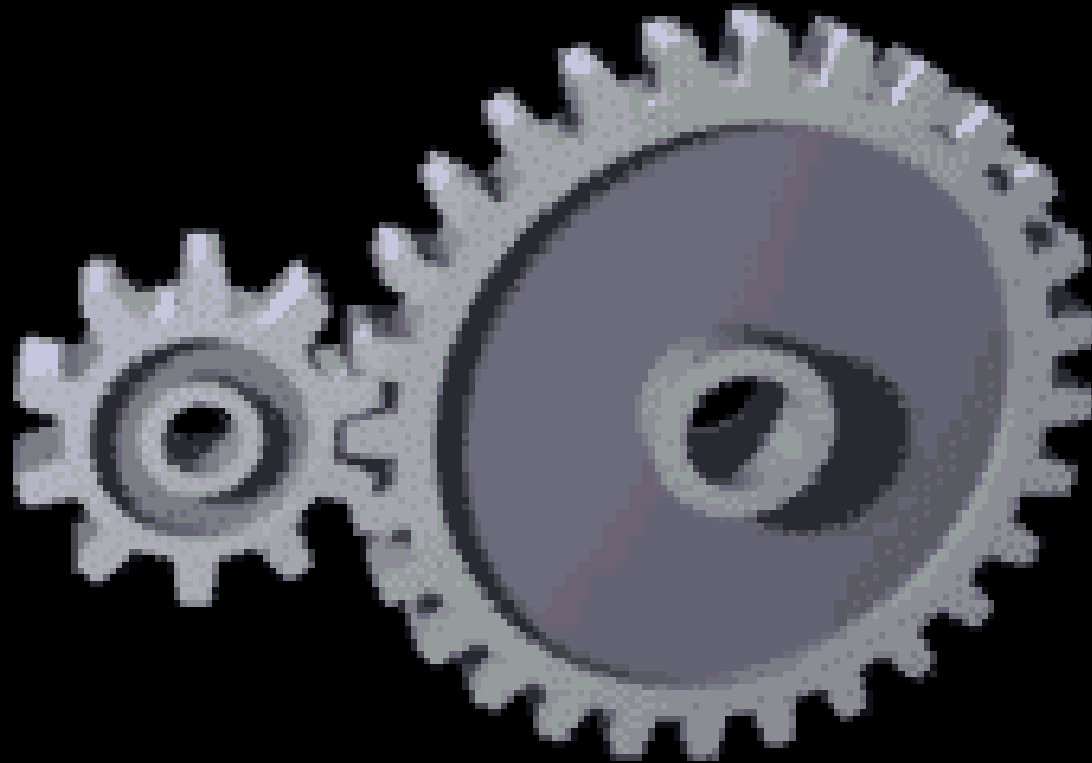


I am Charles Babbage and I
have created Babbage's
Difference Engine and Analytical
Engine.



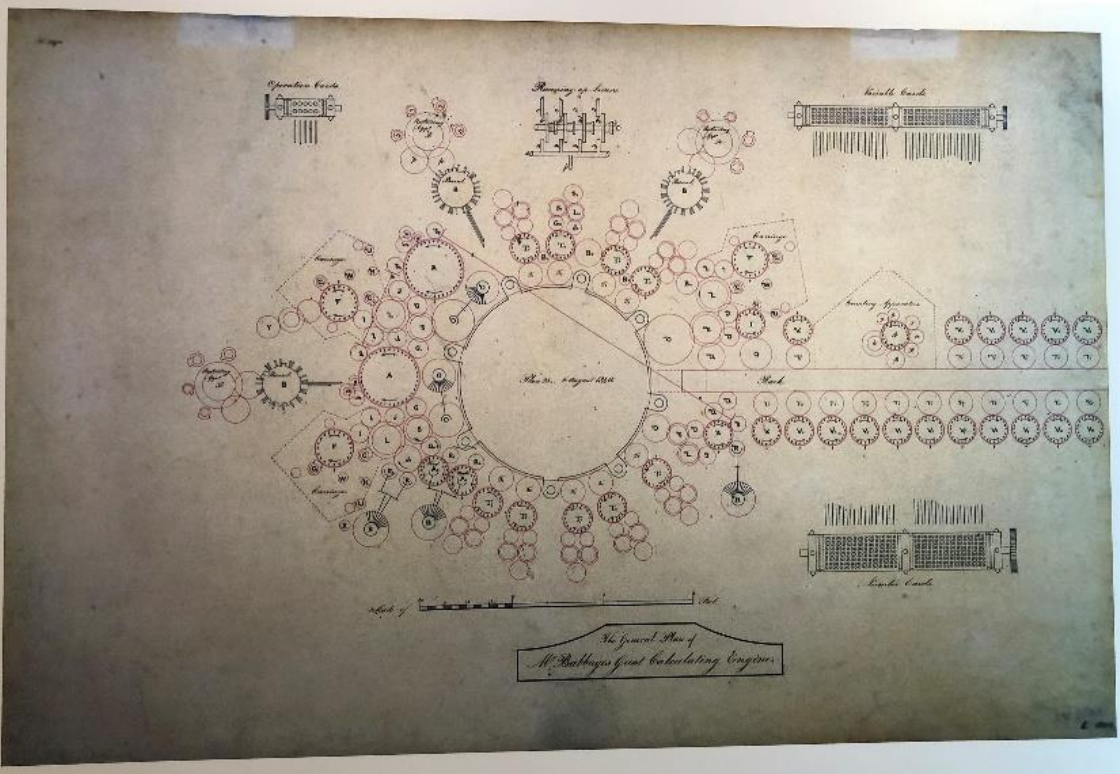
I am Ada Lovelace – first
programmer and contributor to
Analytical Engine.

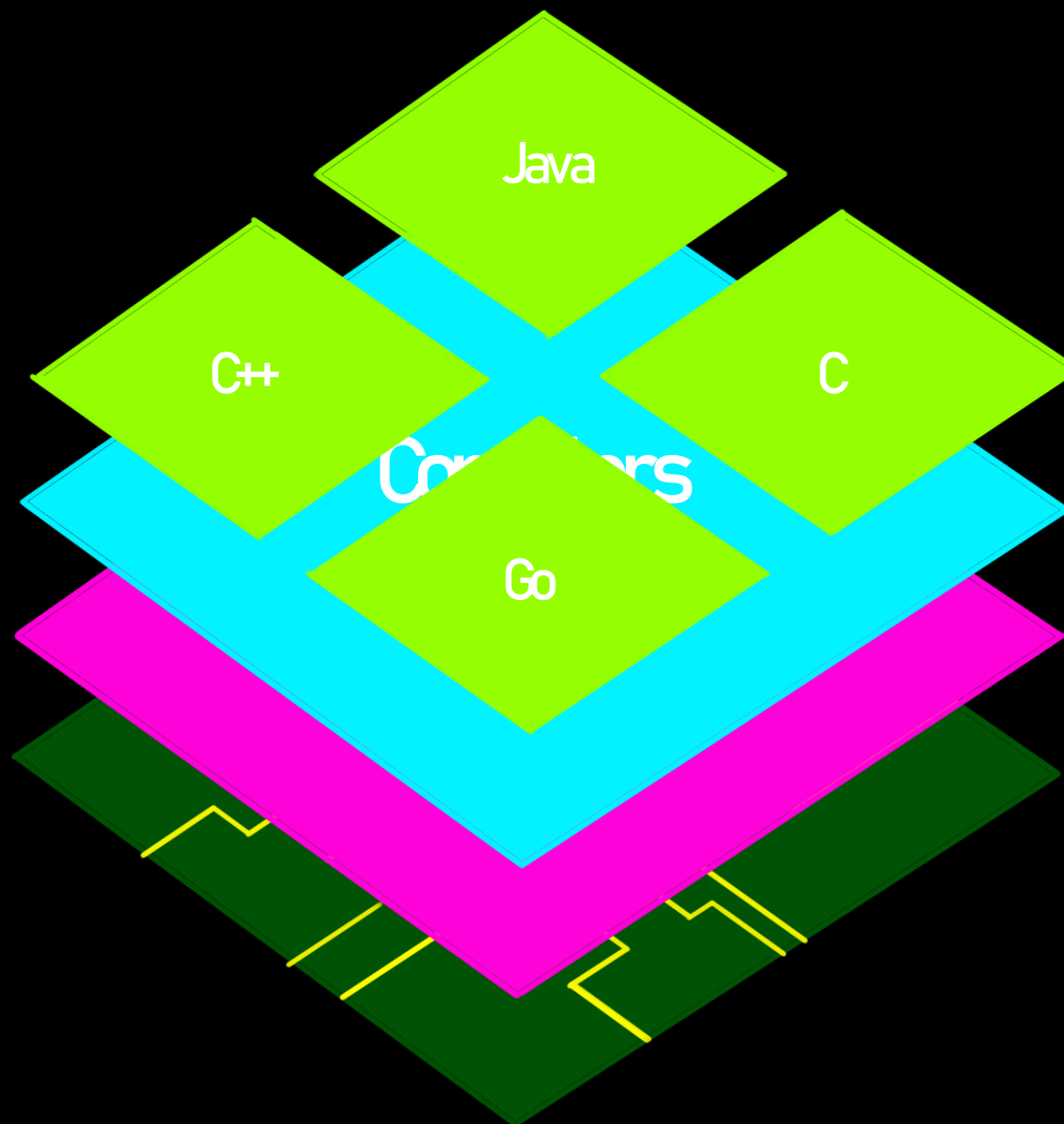
Difference Machine



https://www.youtube.com/watch?v=vdra5Ms__9s

Analitical Engine

[illegible]



Why Go?

<https://github.com/kubernetes/kubernetes>

Languages



Arguments for Go Simplicity:

- Relatively new – 2009
- No VM (VM in Kubernetes is transferred to Containers) - simple and lightweight for microservices
- Goland, VS Code + [Plugins](#)
- Language of K8S

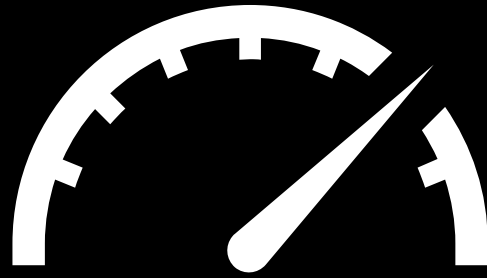
Demo

Success Story

“Nearly two-thirds of the global population will have Internet access by 2023. There will be 5.3 billion total Internet users (66 percent of global population) by 2023, up from 3.9 billion (51 percent of global population) in 2018.” – [Cisco Annual Internet Report \(2018–2023\) White Paper](#)



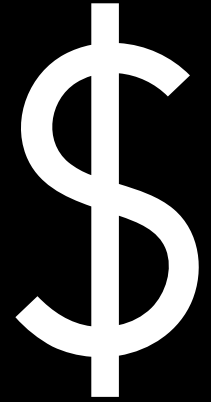
Security



Performance



Competitiveness



Cost



Reliability

OS

APP

APP

APP

APP

☒ Security

☒ Performance

☒ Reliability

☐ Competitiveness

☐ Cost



"Kubernetes is a **container** orchestration engine for automating deployment, scaling, and management of containerized application and workloads."

OS

OS

OS

OS



APP

APP

APP

APP



Horizontal Scaling, Multiple Zones

✓ ☐ Performance



✓ ☐ Competitiveness

OS

OS

OS

OS

☒ Security



☒ Reliability

APP

Container

APP

Container

APP

Container

APP

Container

Hyper Scalers

GKE

AKE

Amazon EKS

OVH MKS

☒ Portability

☐ Cost Effectiveness

APP

Container

APP

Container

APP

Container

APP

Container

Containers

- Enforced by K8S
- Ready-to-run packages
- Requires Container Runtime
- Bound with OS and libraries
- Containers != Virtualization

Docker Demo

K8S Demo

Workloads

- **Deployments**
- StatefulSet
- DaemonSet
- Job/**CronJob**

Used Tech

- <https://kubernetes.io/> - <https://github.com/kubernetes/website/blob/master/LICENSE>,
<https://github.com/kubernetes/kubernetes/blob/master/LICENSE>
- <https://golang.org/> - <https://golang.org/LICENSE>
- <https://docs.docker.com/> - <https://www.docker.com/legal>
- <https://k3d.io/> - <https://github.com/rancher/k3d/blob/main/LICENSE>
- <https://helm.sh/> - <https://github.com/helm/helm/blob/main/LICENSE>

Hack Your Career



Aktualne oferty pracy:

- <https://jobs.sap.com/search/?locationsearch=gliwice>

Śledź nas na:

- <https://hackyourcareer.github.io/>
- <https://www.facebook.com/Hack.your.Career/>
- <https://www.facebook.com/SAPLabsPoland/>

Q&A

Kahoot

- Prosimy o użycie nazwy, która umożliwi Waszą identyfikację
- Aby połączyć się z Kahootem musicie wejść na kahoot.it i podać kod

The End

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