# Entwickler und Architekten

Strategien 2020

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#### Oliver Sturm

- Training Director at DevExpress
- Consultant, trainer, author, software architect and developer for over 25 years

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#### Agenda

Idee: Technologie diskutieren

Was sind Ihre Fragen? Diskussionspunkte?

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#### Anregungen

- COVID-19 was ändert sich?
- Microservices, ja oder nein? Und wie?
- Cloud muss das sein? Welche?
   Worauf kommt's an?
- Serverless wird da nicht alles schwieriger?
- CQRS? Event Sourcing? Eventual Consistency? GraphQL? Moderne Datenzugriffspatterns
- Container und VMs Docker,
   Kubernetes, Vagrant, Terraform...

- Blazor? Ist das die Zukunft? Server mit SignalR oder Client mit WASM?
- Wie mache ich am besten Mobile?
- gRPC Microsoft's neuer (?) Hype
- React vs Vue vs Angular usw....
- TypeScript oder doch einfach JavaScript?
- Oliver Sturm's Best Practices Architekturmodell

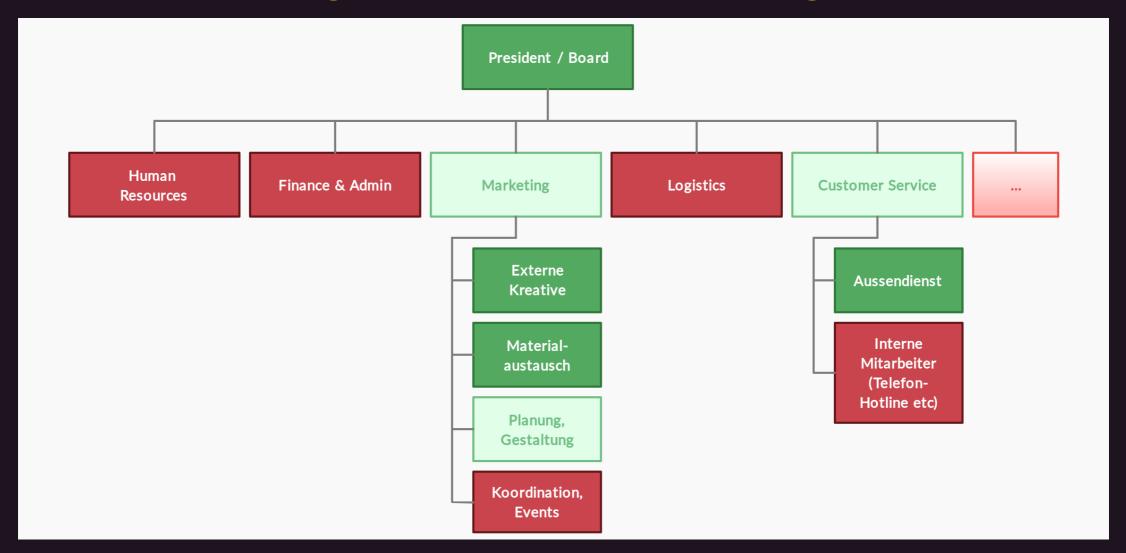
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#### Fragen

noch keine

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#### Vor COVID - Eingeschränkter Remotezugriff



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#### Vor COVID - Eingeschränkte Remote-Funktionalität



Human Resources Customer Relationship Management

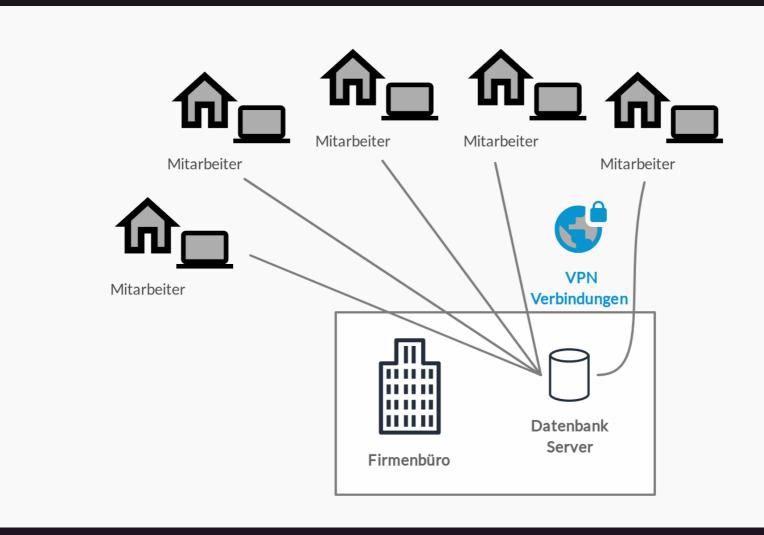
Business Intelligence

Supply Chain Management

Inventory Management Financial Management

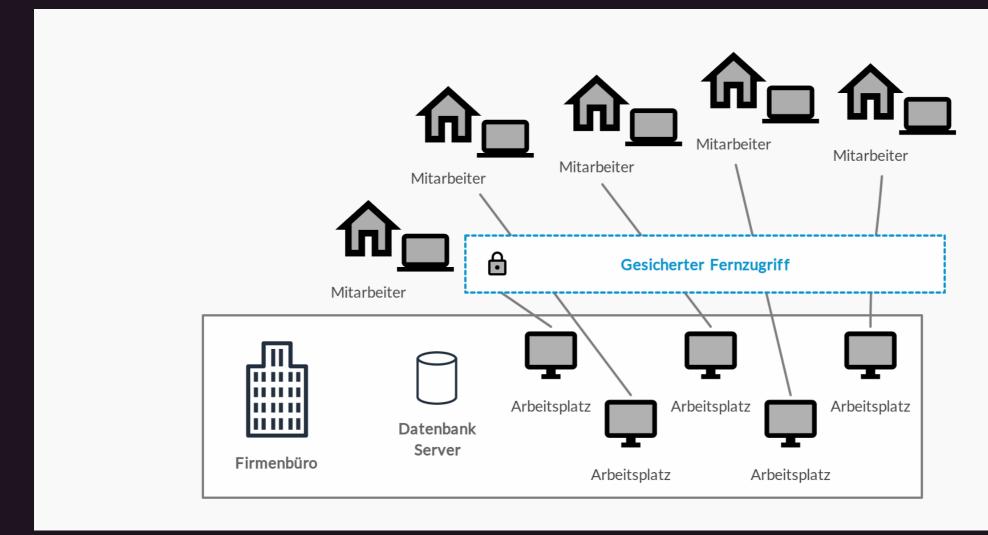
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#### Fernzugriff auf eine Datenbank



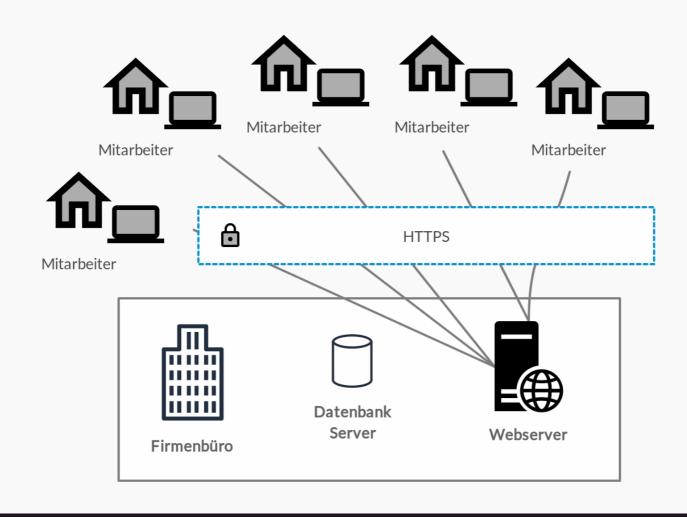
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#### Fernzugriff mit Remote Desktop



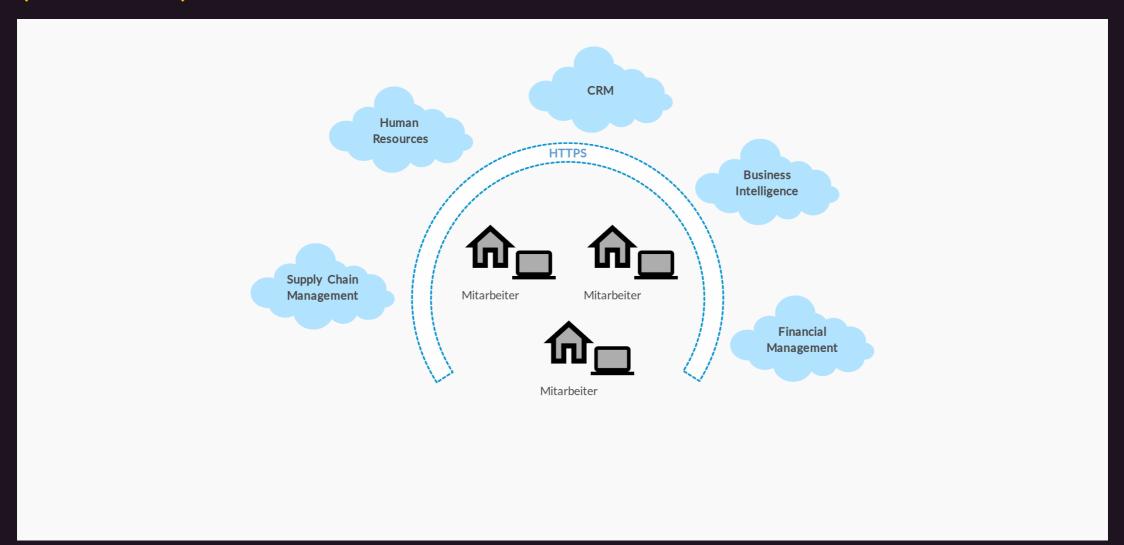
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#### **Einfache Web-Anwendung**



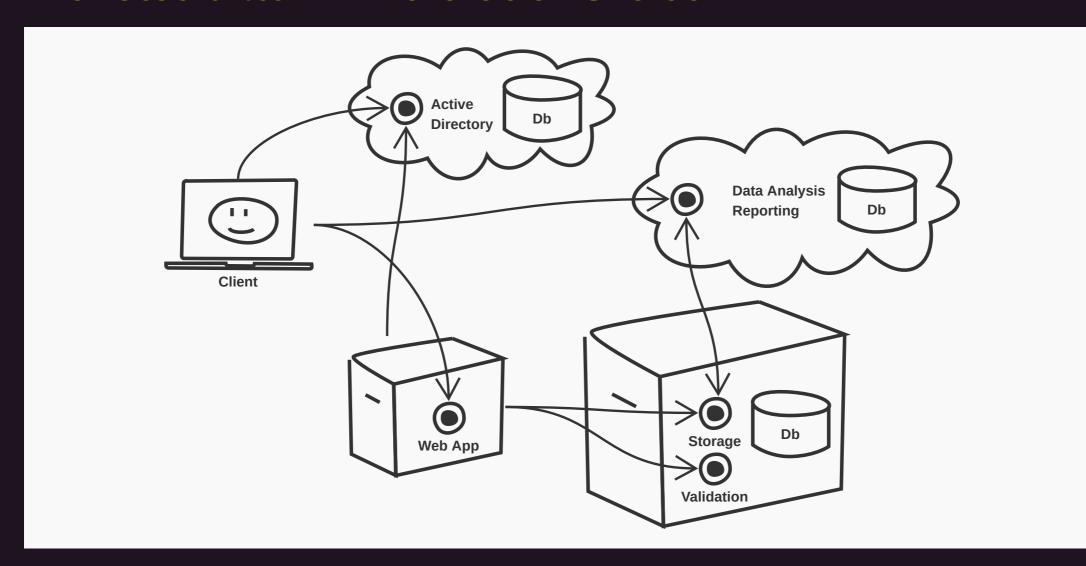
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### (Micro-?) Services



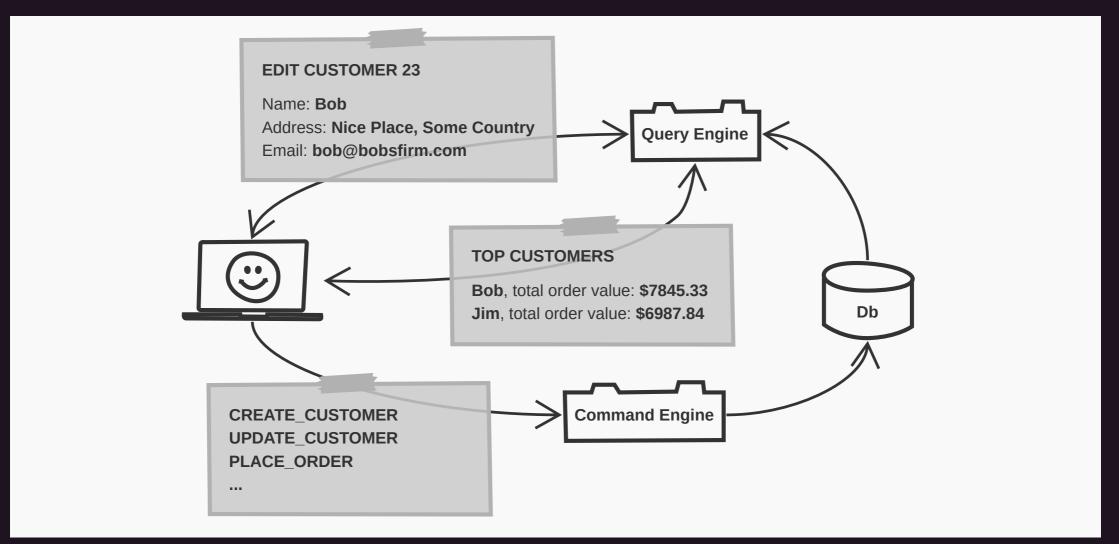
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#### Dienststruktur - Micro oder Größer



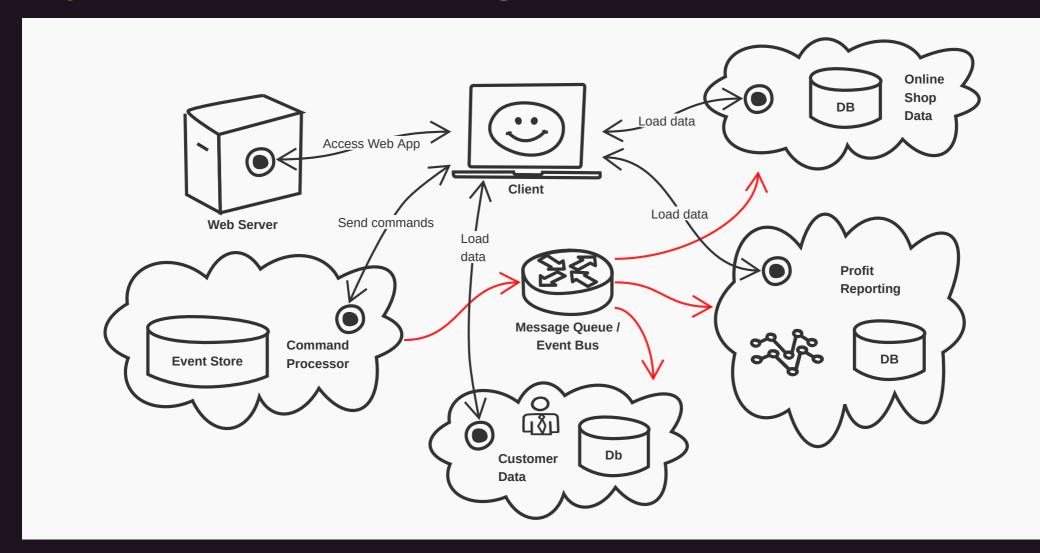
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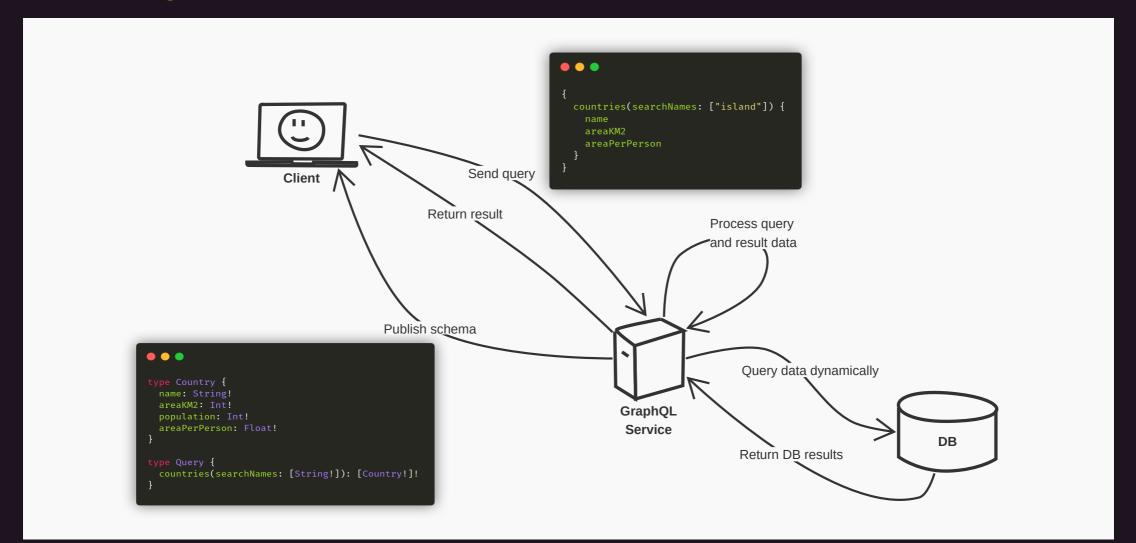
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#### **CQRS** mit Event Sourcing



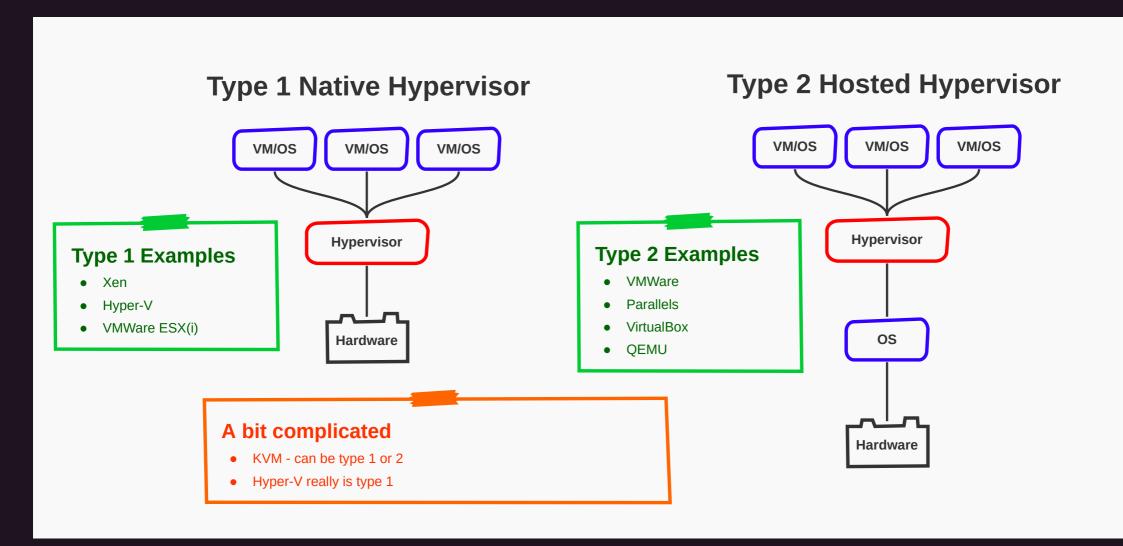
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#### GraphQL



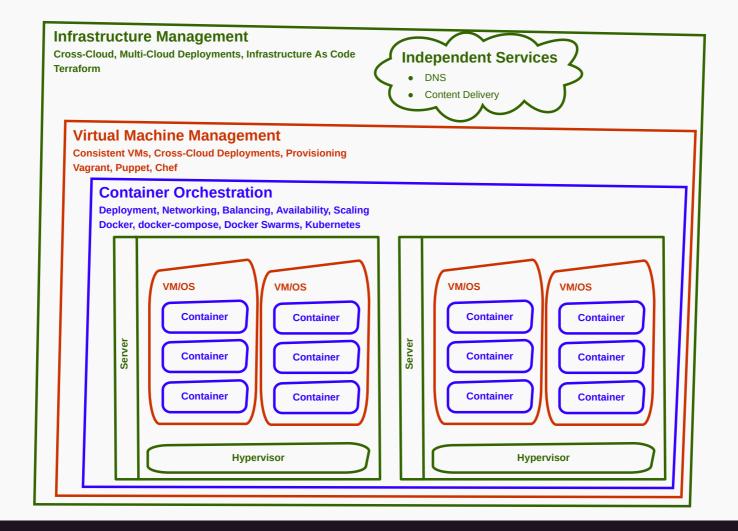
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#### Hypervisors



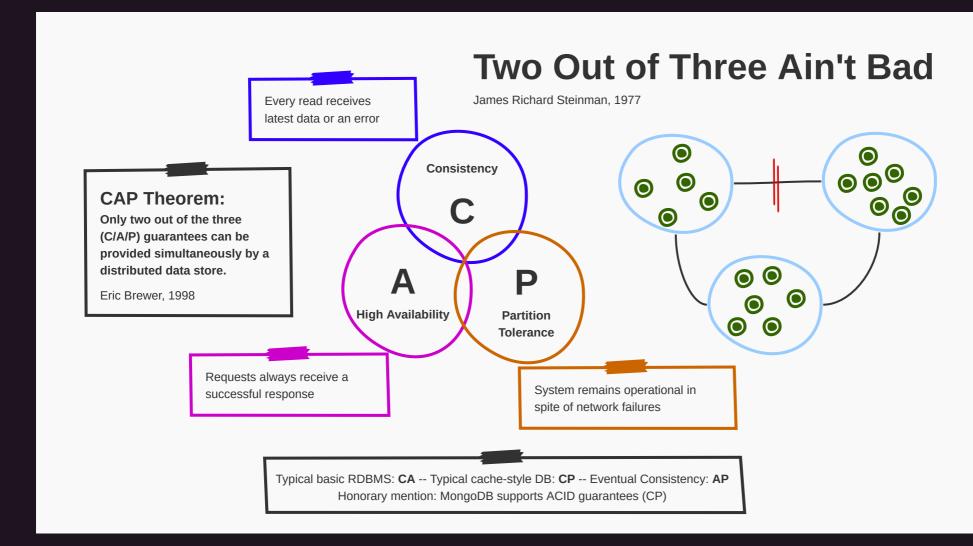
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#### **Container und VMs**



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#### **CAP Theorem**



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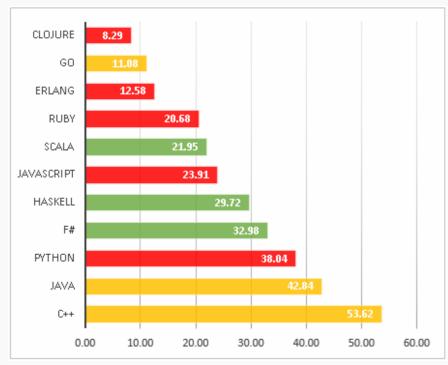
#### JavaScript vs TypeScript

#### Languages by bug density - GitHub repos with >100 stars

In green, in the "advanced" static typed languages corner: Haskell, Scala and F#.

In orange, in the "old and boring" static typed languages corner: Java, C++ and Go.

In red, in the dynamic typed language corner: JavaScript, Ruby, Python, Clojure and Erlang.



Daniel Lebrero, May 2016, The broken promise of static typing

My own prediction is that TDD is the deciding factor. You don't need static type checking if you have 100% unit test coverage. [...]

I predict, that as TDD becomes ever more accepted as a necessary professional discipline, dynamic languages will become the preferred languages.

Uncle Bob Martin, May 2016, Type Wars

When it comes to bug reduction, I think it's fair to say:

Static types are overrated.

Eric Elliott, June 2016, The Shocking Secret About Static Types

I will not use the current version of TypeScript in my next large scale application, because the larger the project is, the more the costs of using TypeScript compound.

Eric Elliott, January 2019, The TypeScript Tax

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#### Sources

- This presentation:
  - <a href="https://oliversturm.github.io/developers-and-architects/basta-2020">https://oliversturm.github.io/developers-and-architects/basta-2020</a>
  - PDF download:
     <a href="https://oliversturm.github.io/developers-and-architects/basta-2020/slides.pdf">https://oliversturm.github.io/developers-and-architects/basta-2020/slides.pdf</a>

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## Thank You

Please feel free to contact me about the content anytime.

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