# React Hooks

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#### Agenda

- Hooks vs HOCs what's the point?
  - (Note the amazing wordplay in the previous bullet)
- Standard hooks
- Custom hooks
- Hooks in 3rd party libraries

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#### What's the point of React Hooks?

- React has a functional structure with a side-effect free rendering mechanism
- Preference for functional component implementation
  - Class-based components still remain available!
- HOCs always supported for modularization
- Complex class and HOC structures end up with deep nesting
- Hooks: functional state management based on closures
- Popular by now in other JS-based environments

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#### The Hook Rules

```
const MyComponent = () \Rightarrow {
    // Only use hook calls at the top level (that's rule 1)
    // of React functions (that's rule 2).
    // Note that "React functions" include custom hooks.

const [val, setVal] = useState();

return <div>Val is {val}</div>;
};
```

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#### Fragen

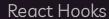
- Cloud Kostenkontrolle wie weiss man, was die eigene Anwendung kostet?
- Hochverfuegbarkeit notwendig kann man "hybrid" oder lokal arbeiten, wenn die Cloud unzugaenglich ist? Docker -Registry lokal?
- On Premise-System in die Cloud migrieren, moeglichst ohne Aenderungen, was sind die Stolpersteine?
- GraphQL wo gehoert das ins Datenzugriffssystem? Im Vergleich mit

#### OData?

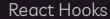
- Daten transferieren zwischen lokal und Cloud im Hybridsetup?
   Datenbankinhalte
- Beispiel Consul Azure-Service oder separater Container - SaaS oder separates Deployment?

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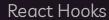
# Vor COVID - Eingeschränkter Remotezugriff



### Vor COVID - Eingeschränkte Remote-Funktionalität



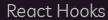
# Fernzugriff auf eine Datenbank



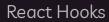
# Fernzugriff mit Remote Desktop



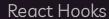
# Einfache Web-Anwendung



# (Micro-?) Services



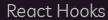
### Dienststruktur - Micro oder Größer



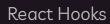


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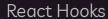
# **CQRS mit Event Sourcing**



# **GraphQL Basics**



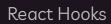
# GraphQL Endpoint in Readmodel



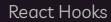
# GraphQL - Frontend Service



# Hypervisors



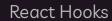
### Container und VMs



# **CAP Theorem**



# JavaScript vs TypeScript



#### 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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