

- Why build system?

• who are users?

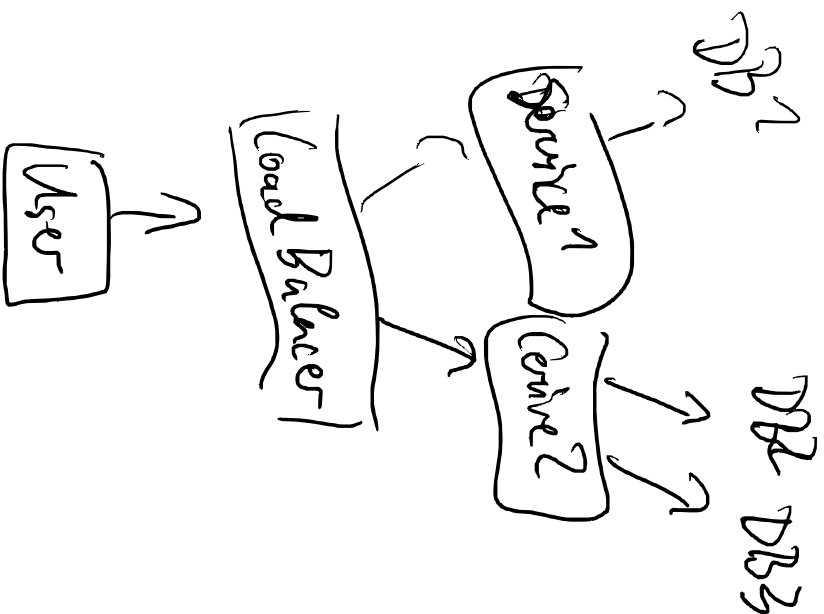
what features?

Get Top Features

$\Rightarrow$  Specify N-F-Requirements  $\hookrightarrow$  (App)

$\Rightarrow$  Bottlenecks?

1. User  $\hookrightarrow$  API [Front and  
 $\downarrow$  Rest  
(live500.net)  
by server?



Session 1, 1000  
→ don't change

OUT OF  
SCOPE  
→ Node 2 is  
skipped 2!

o Anbindung von Pukner Airlines

(o Session spendert Flugpreise?)  $\rightarrow$  Wie Preise?

o Flight (From  $\rightarrow$  To)  $\rightarrow$  no intermediate steps?

o Bottlenecks  $\rightarrow$  many failed requests

/ lot of requests (users online)

$\Rightarrow$  ~~OVERBOOKING?~~

$\hookrightarrow$  increase "computational power" every hour  
for few minutes

$\hookrightarrow$  cache  
 $\hookrightarrow$  load balancer

Reads higher than  
writes ( $\Rightarrow$  less bottlenecks)

$\Rightarrow$  DB  $\rightarrow$  Caches - FOL Caches

## Services

- Data Ingestion (→ Process flight data from airlines)
- Reservation Service (→ Manages reservations & enforces consistency  
(= Cache Prices?))
- Search Service (→ Find searched flight)

## External APIs

- Websocket/batch - job stream periodic updates
- (→ Payment API → service?!)

### Partitioning

- AIRPORT
- Fluggesellschaft

↗ high read-write ratio

For writes Single-Leader, potentially  
Multi-Leader

↳ complex vs speed?  
→ consensus, speed

