

Distributed Systems

-

Project Bang

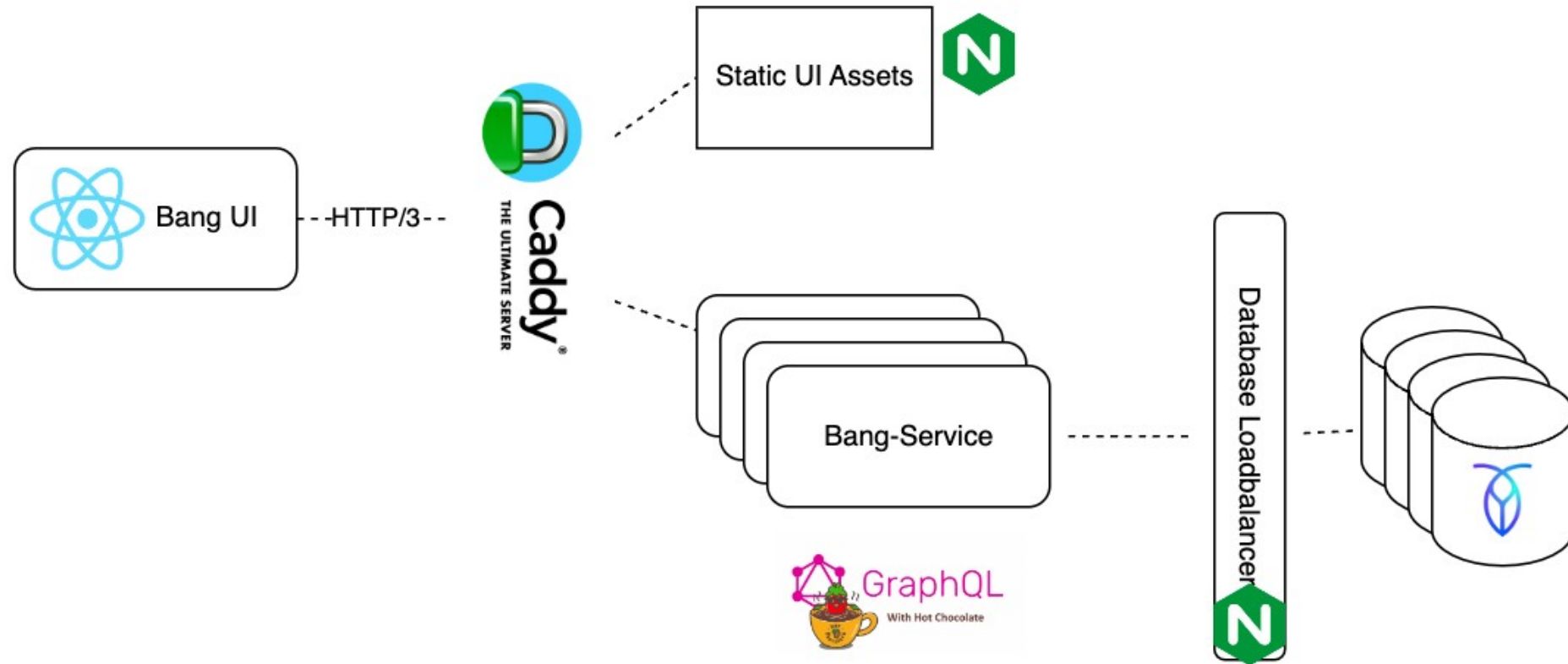
Lucien Zimmermann & Florian Rohrer

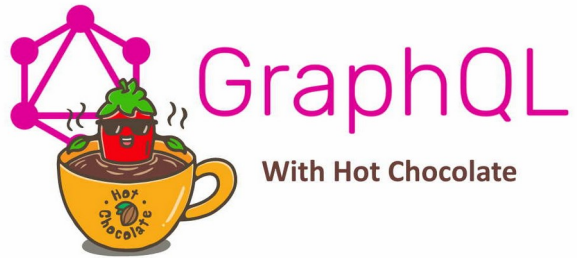
Goals

- Distributed Pomodoro System
- Learning about load-balancing
- Building a resilient service capable of failover

Project Bang

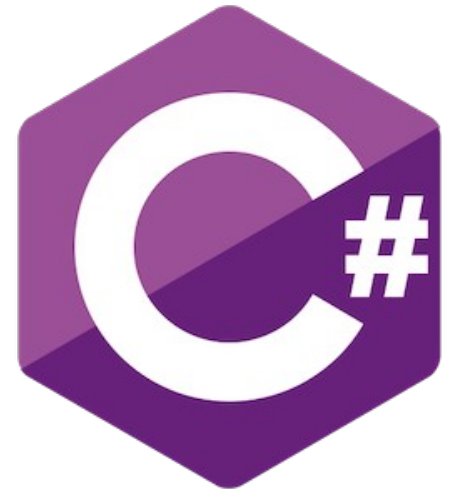
#Architecture





Bang-Service

#Backend



```
Run ▶
1  mutation createTeam {
2    createTeam (input: {
3      teamName: "Clean Coders!",
4      settings: {
5        sessionDurationMinutes: 25
6        longBreakDurationMinutes: 10
7        shortBreakDurationMinutes: 5
8      }
9    }) {
10     team {
11       teamCode
12     }
13   }
14 }
15
```

Bang-UI

#Frontend



Tailwind CSS



VITE

Caddy

#LoadBalancer

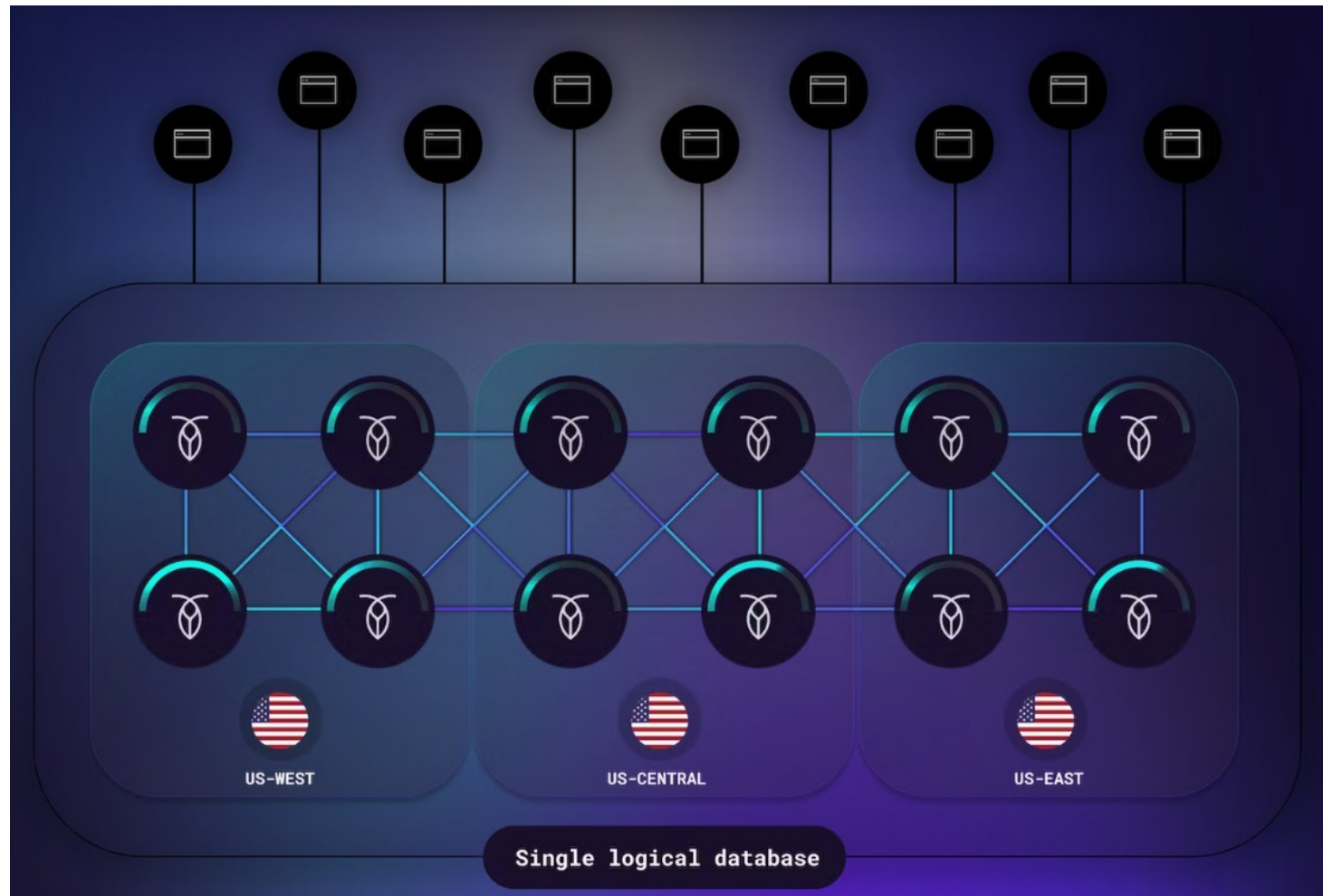


Caddy[®]
THE ULTIMATE SERVER

LoadBalancing für mehrere
Backend-Instanzen, unterstützt
durch HealthChecks

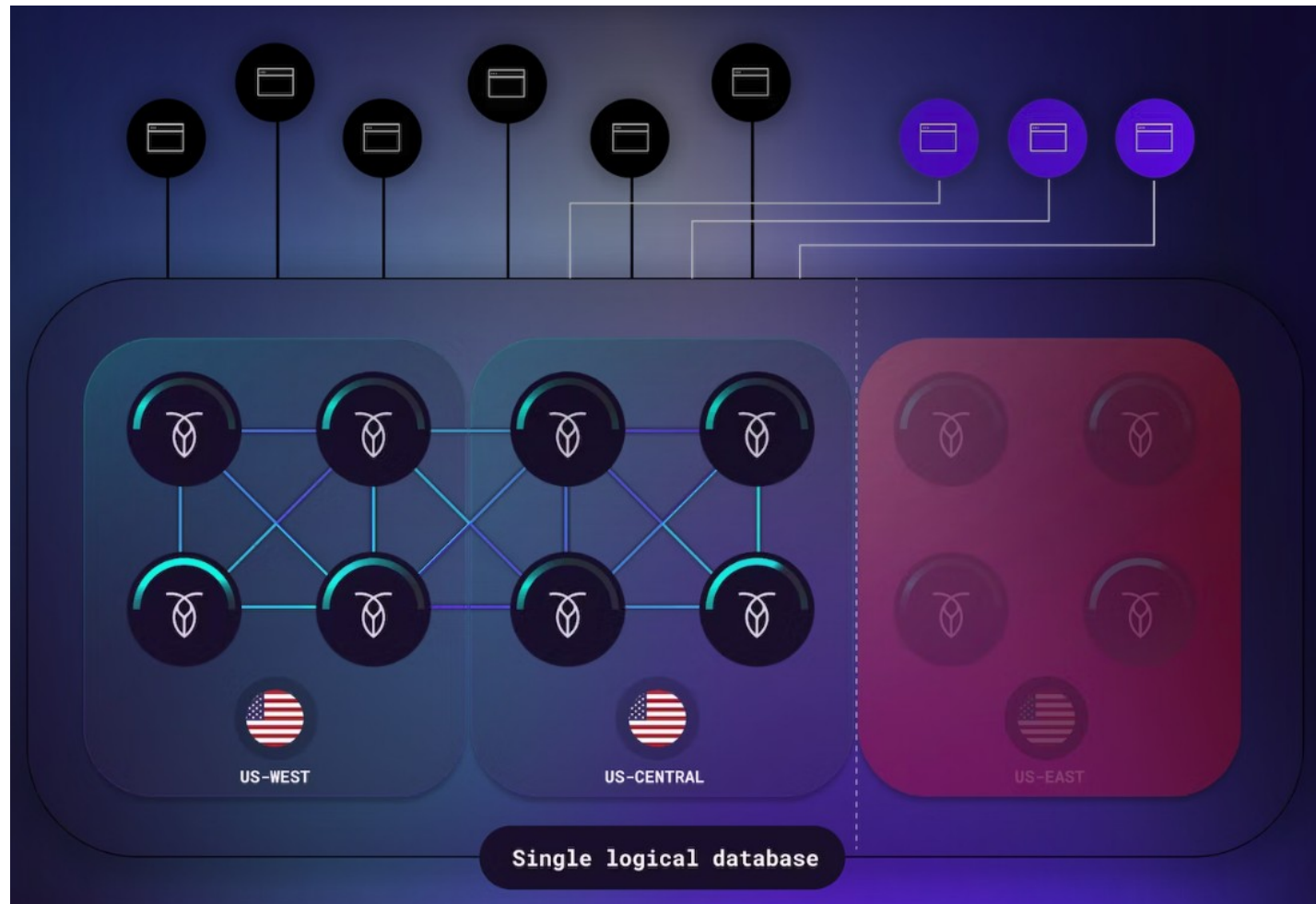
Cockroach-DB “Scale Fast...”

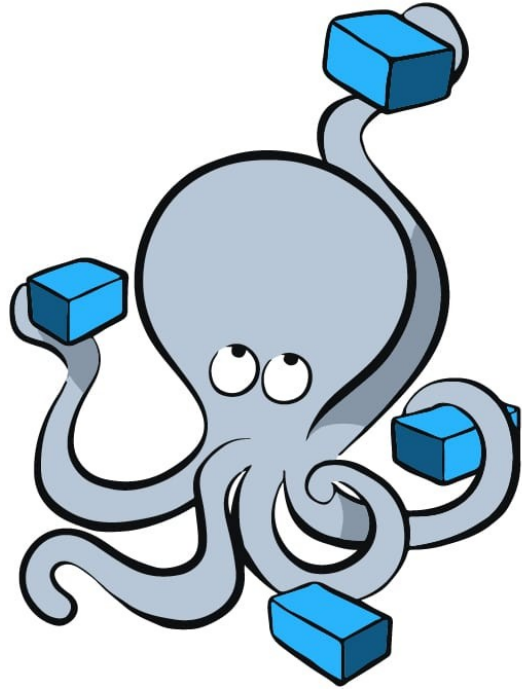
#Database



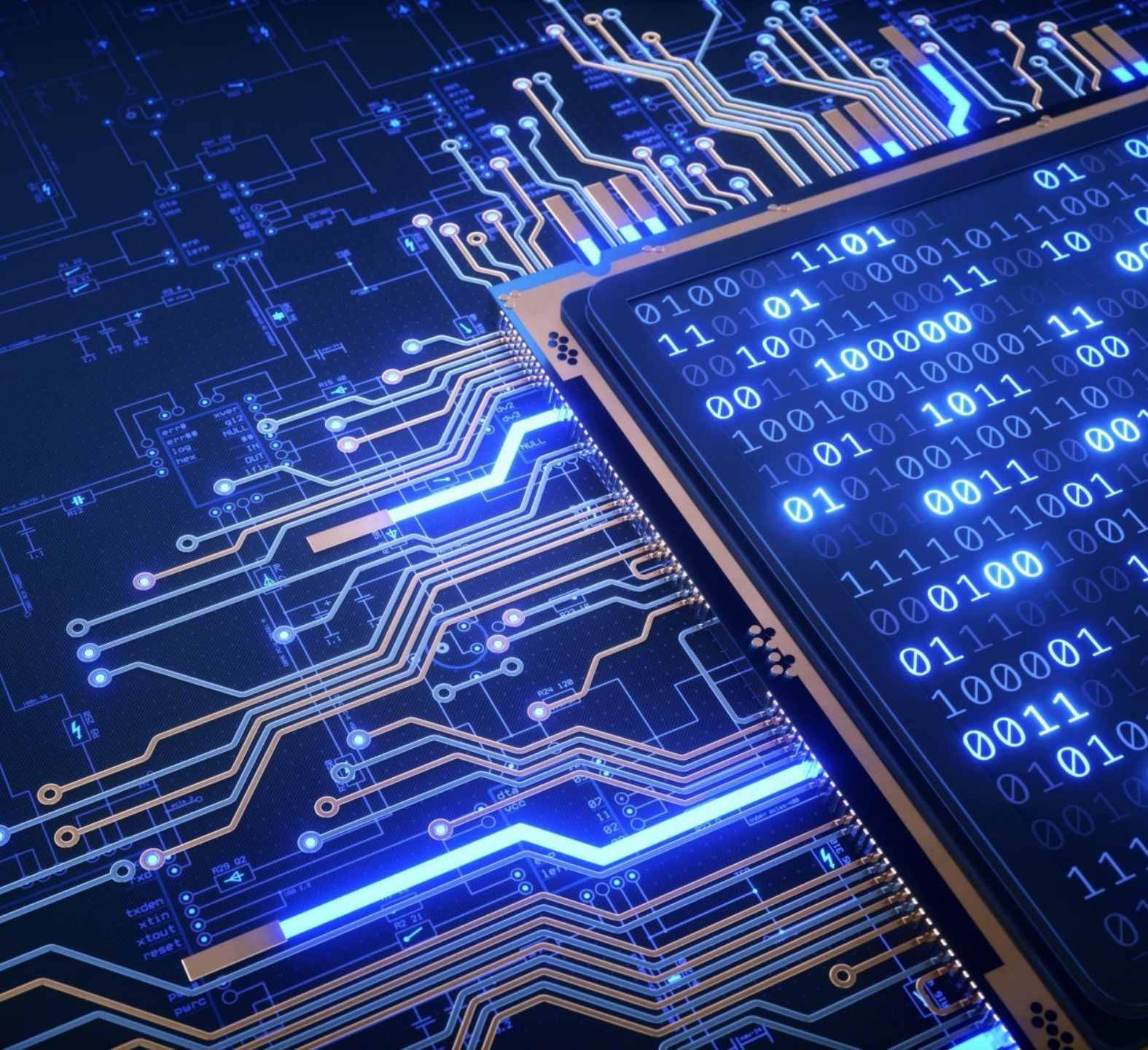
Cockroach-DB "...survive Disaster"

#Database





docker
Compose



Demo