

SRECon
2023

Avoiding Cachepocalypse in the Land of the Monolith

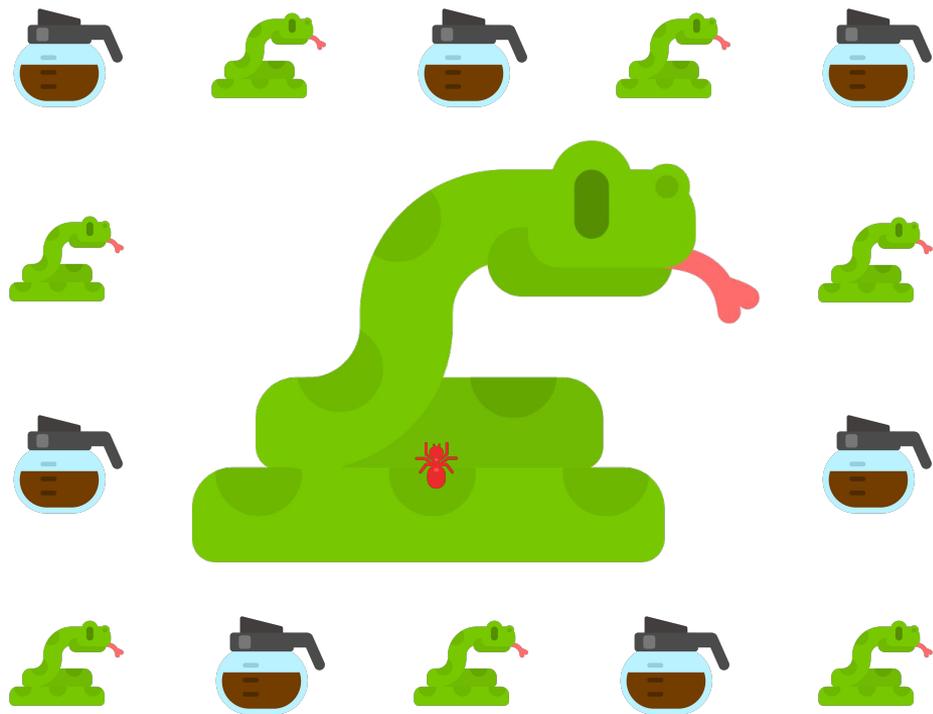
David Amin
SRE @ Duolingo



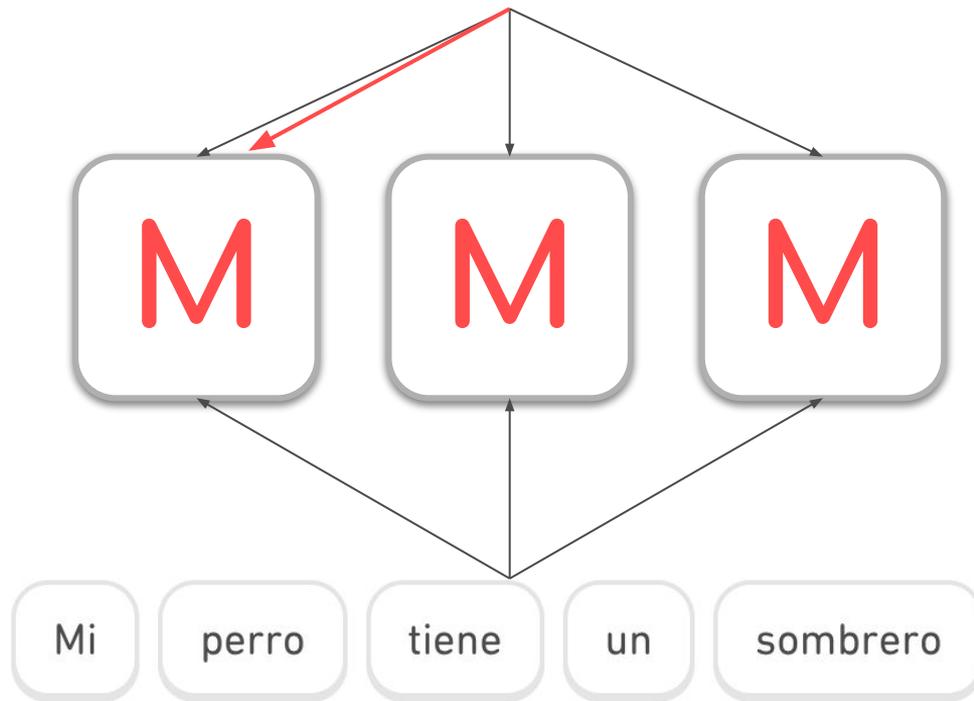
Roadmap

- Architecture
- Problem
- Debugging
- Disaster
- Recovery
- Takeaways

Architecture



Architecture



Architecture

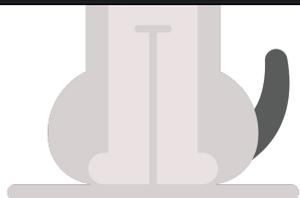


Current connection count ▾



— 0001
— 0002

max	avg	current
46.98 K	46.37 K	46.72 K
23.39 K	23.17 K	23.36 K



Mi perro tiene un sombrero

Problem

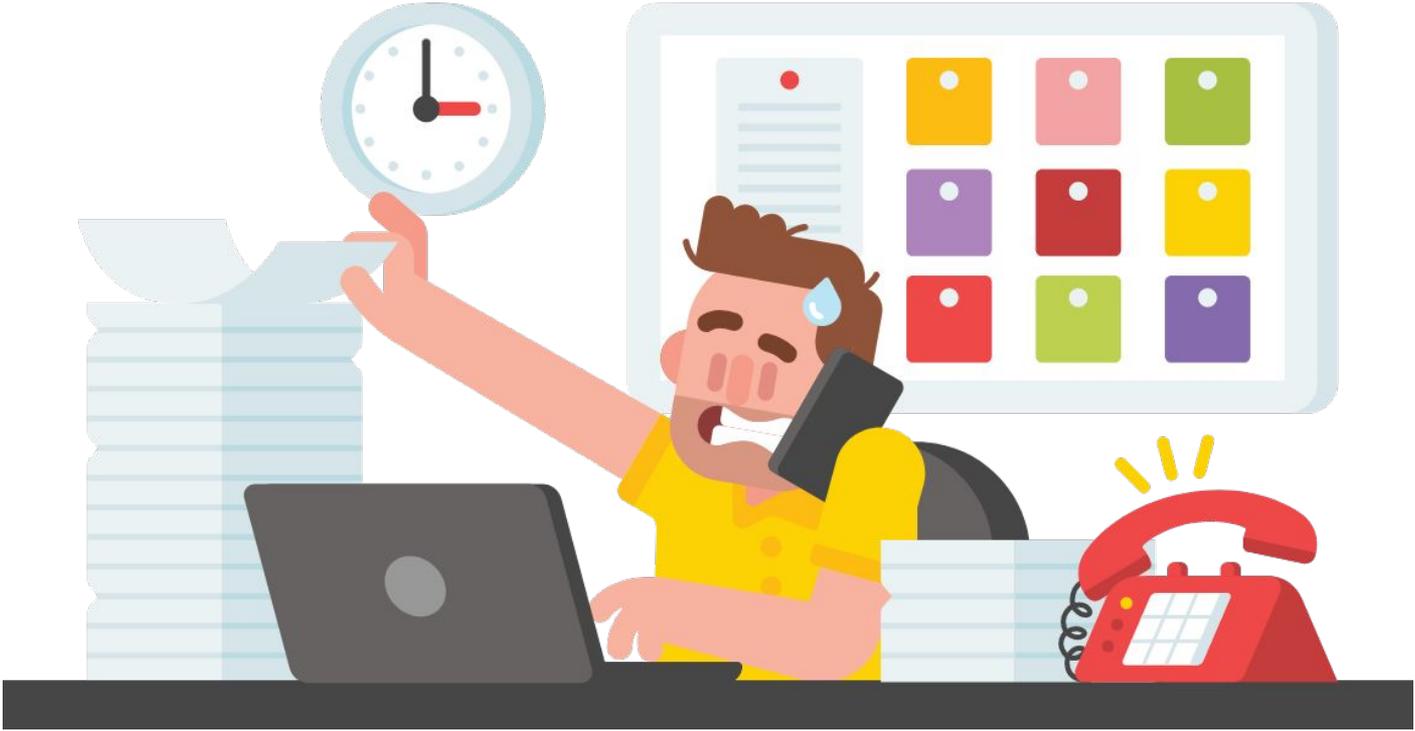


- Horizontal scaling limit
- Business critical issue
- 3 weeks to fix

Debugging



Disaster



Disaster

```
ValueError: invalid literal for  
long() with base 10: 'Mi perro  
tiene un sombrero'
```



Recovery

Flag indicates text content in pylibmc \geq 1.6.0



Flag indicates bool content in pylibmc $<$ 1.6.0



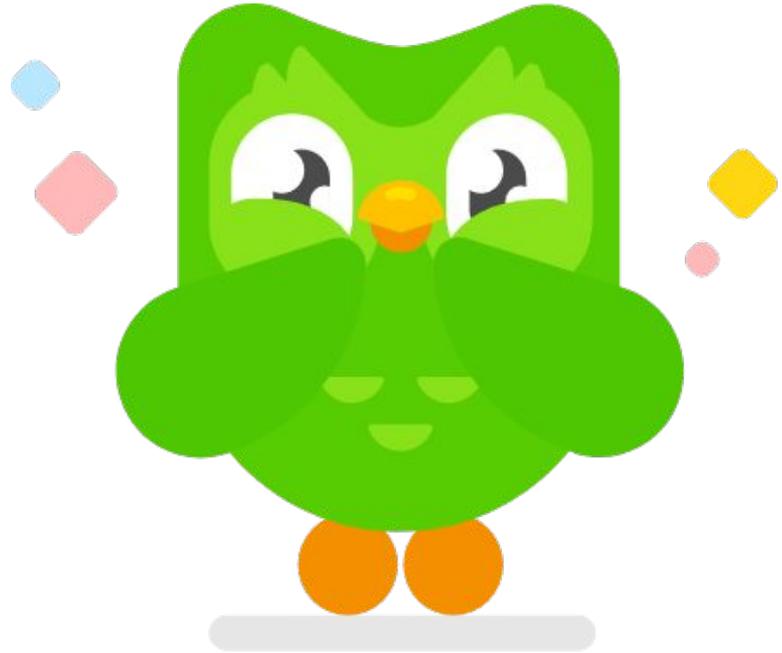
¡Lo siento! ¡ !

Recovery



Takeaways

- Make space to volunteer
- Take calculated risks
- Invest in fast, safe debugging



thank you

