

A wide-angle photograph of a winding asphalt road leading through a valley towards a range of majestic, snow-capped mountains under a dramatic, cloudy sky.

**Real time data and
charting in the cloud**

About me

- Tech Lead Digital Ocean
- Worked in Finance at Bloomberg & Thomson Reuters
- Built Timeseries database
- Writing Book Microservices in Go



**To follow Along
Grab this repo**

https://github.com/mattkanwisher/demo_stocks_digitalocean

A photograph of a sailboat's deck during sunset. The sun is low on the horizon, casting a warm glow over the dark blue ocean. The sky is filled with scattered clouds. In the foreground, a person's hands are visible on the steering wheel of the boat. The railing of the deck is visible on the left, and the mast and rigging of the sailboat are on the right.

Building a real time app

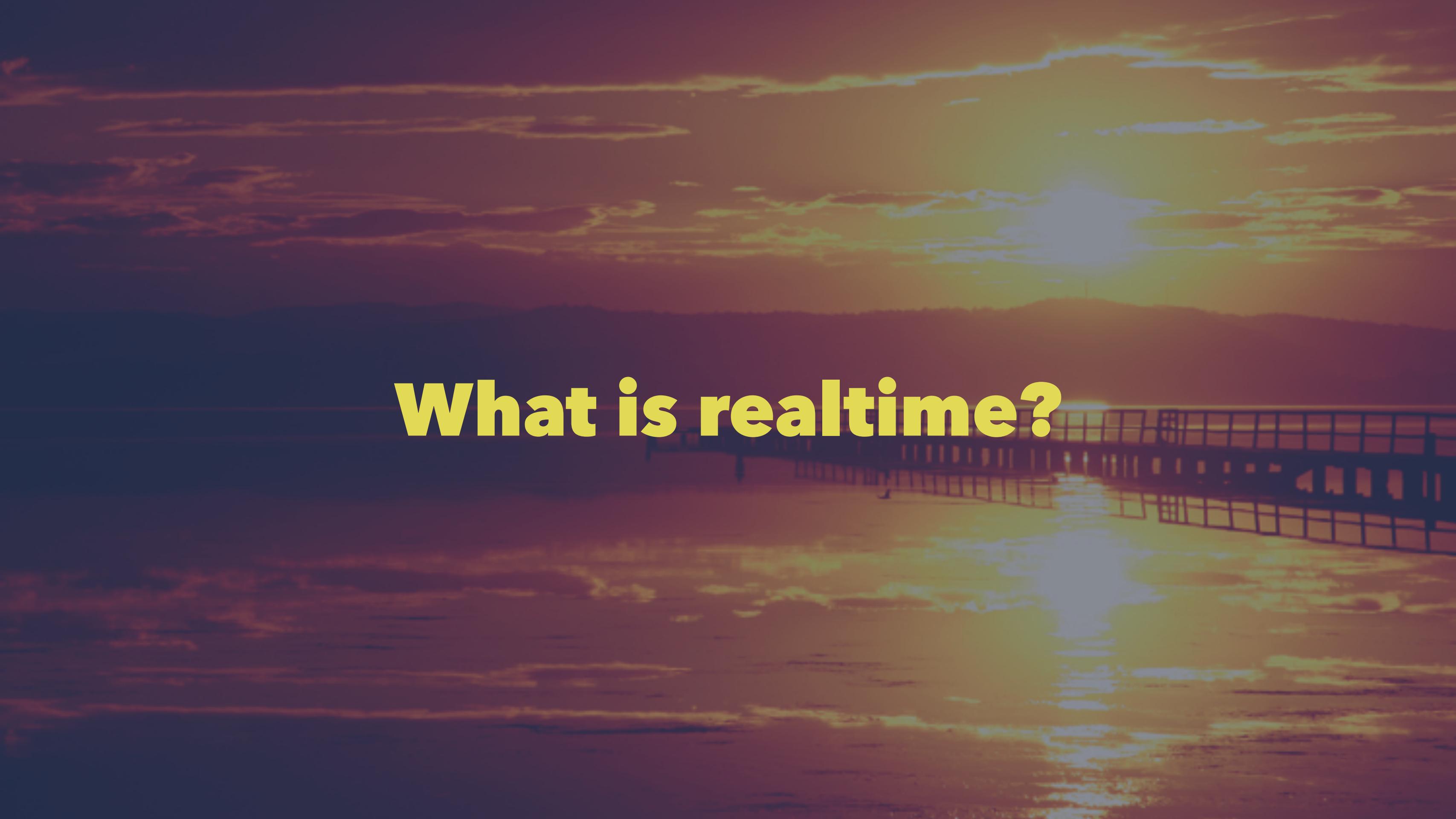


What is a Timeseries





What is a microservice

A wide-angle photograph of a city skyline at sunset. The sky is filled with warm, orange, and yellow hues, with scattered clouds. In the foreground, there's a body of water reflecting the colors of the sky. A long bridge with a grid-like pattern of lights spans across the water. The city buildings are visible in the background, silhouetted against the bright sky.

What is realtime?

What are the protocols

- Websockets
- Sockets
- Http Polling
- Http Long Poll
- Server side events
- http 2.0 Server Push

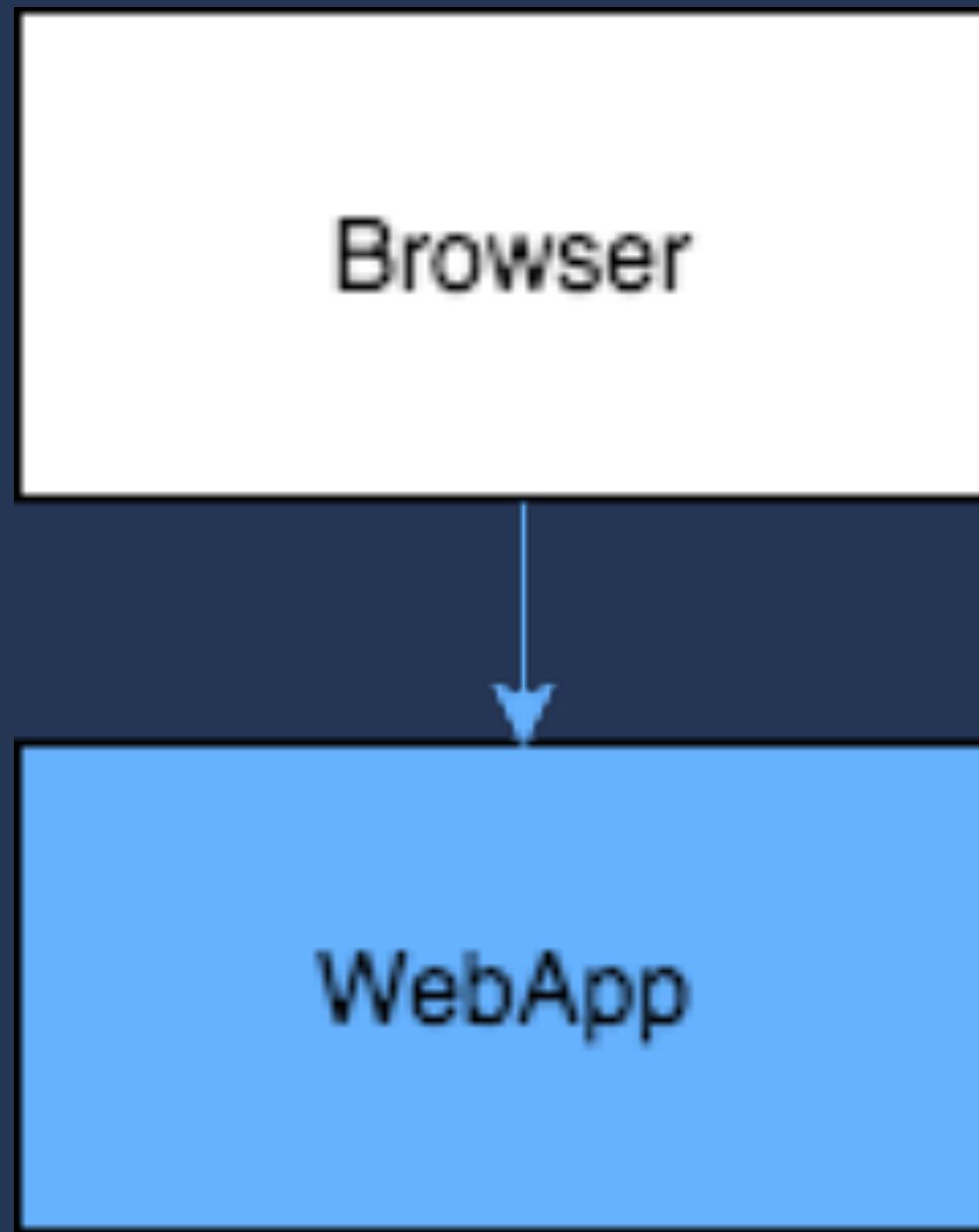
Sockets.io Library

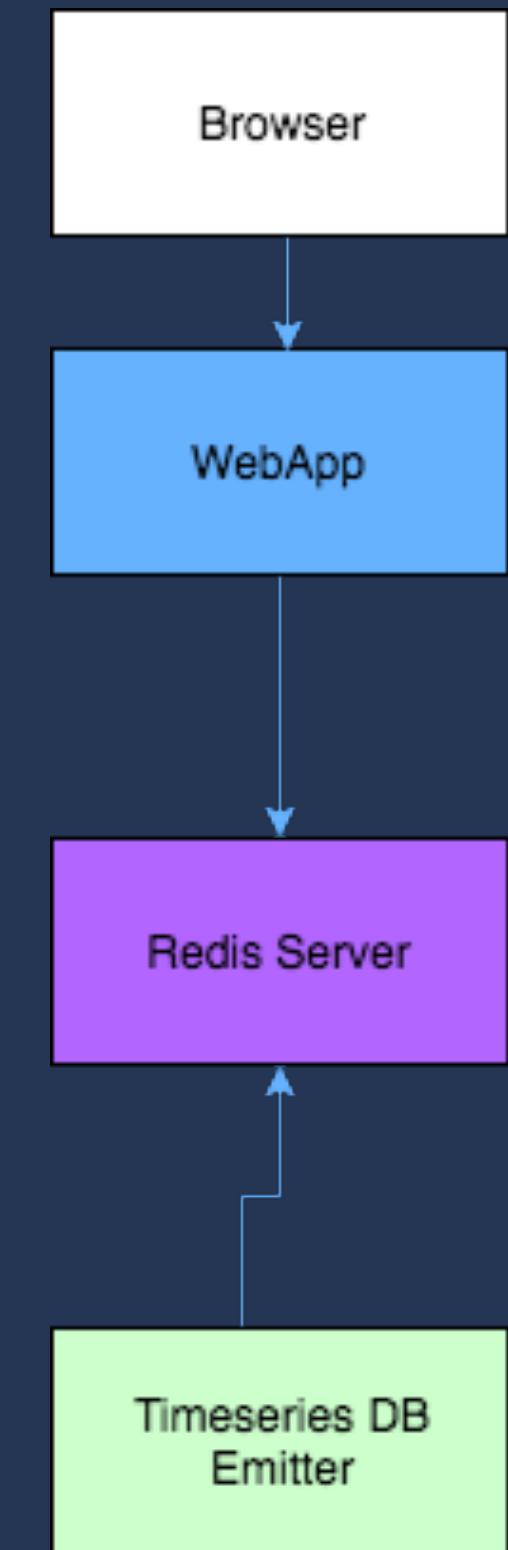
FAIL

Demo build App

Scaling realtime Apps

Current Arch





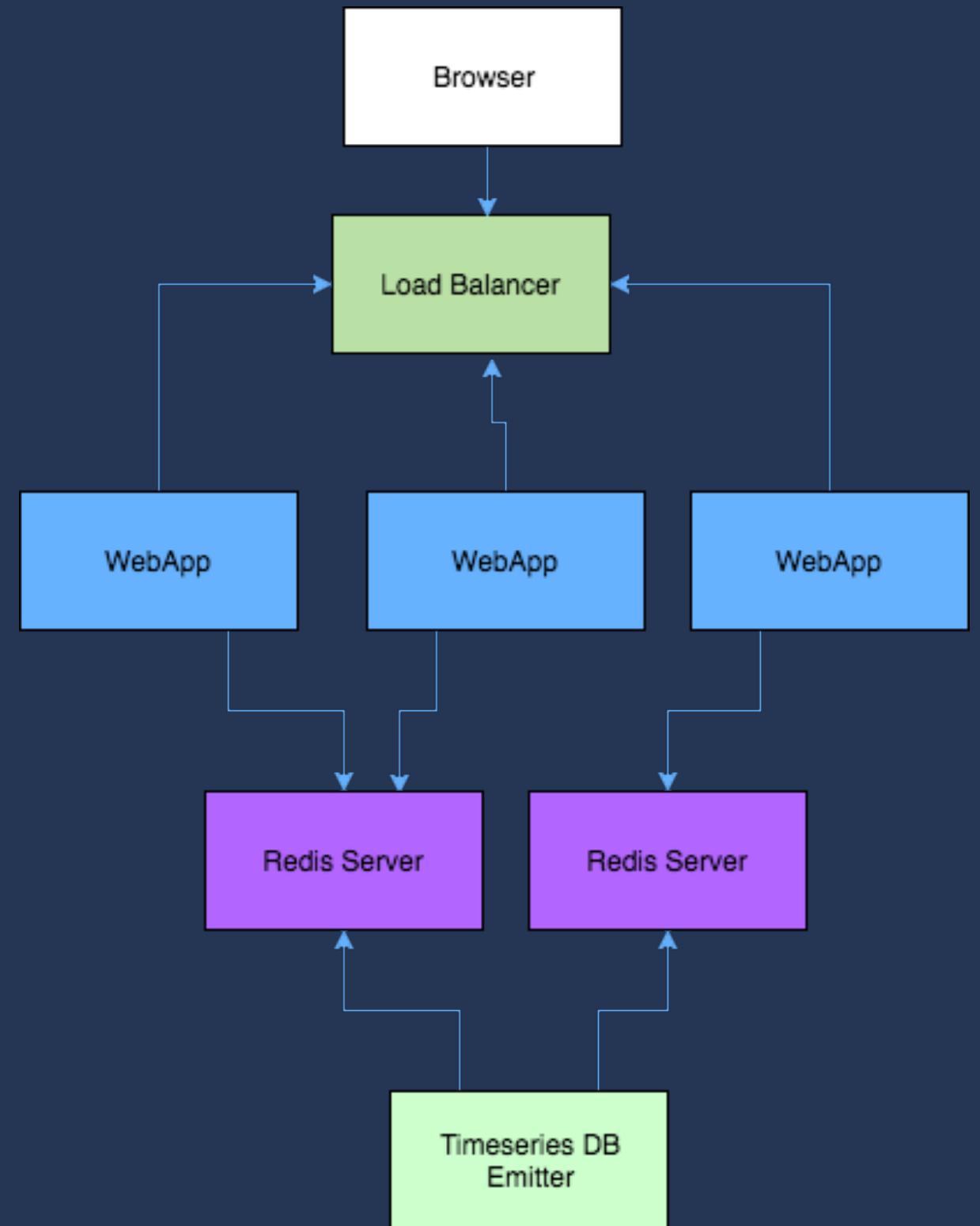
Demo time

A wide-angle photograph of a majestic mountain range. The mountains are covered in a thick layer of white snow, with dark, rocky outcrops visible through the snow. The peaks are rugged and sharp. The sky above is a clear, pale blue with no clouds. The overall scene is one of natural beauty and grandeur.

Production

The background of the image is a clear blue sky filled with numerous colorful kites of various shapes and sizes. Some kites are simple diamond shapes, while others are more complex, multi-colored designs. The kites are scattered across the frame, creating a sense of motion and activity.

Docker





Demo Load balancer/Docker

Kubernetes



Ansible

A large stack of cut redwood logs is arranged in several horizontal layers. The logs are weathered and show signs of age, with some darker staining and small white spots. They are piled high, filling the frame.

Logs / Monitoring

DNS



Final Demo

Questions?

Code:

https://github.com/mattkanwisher/demo_stocks_digitalocean

Matthew Campbell

Twitter: @kanwisher