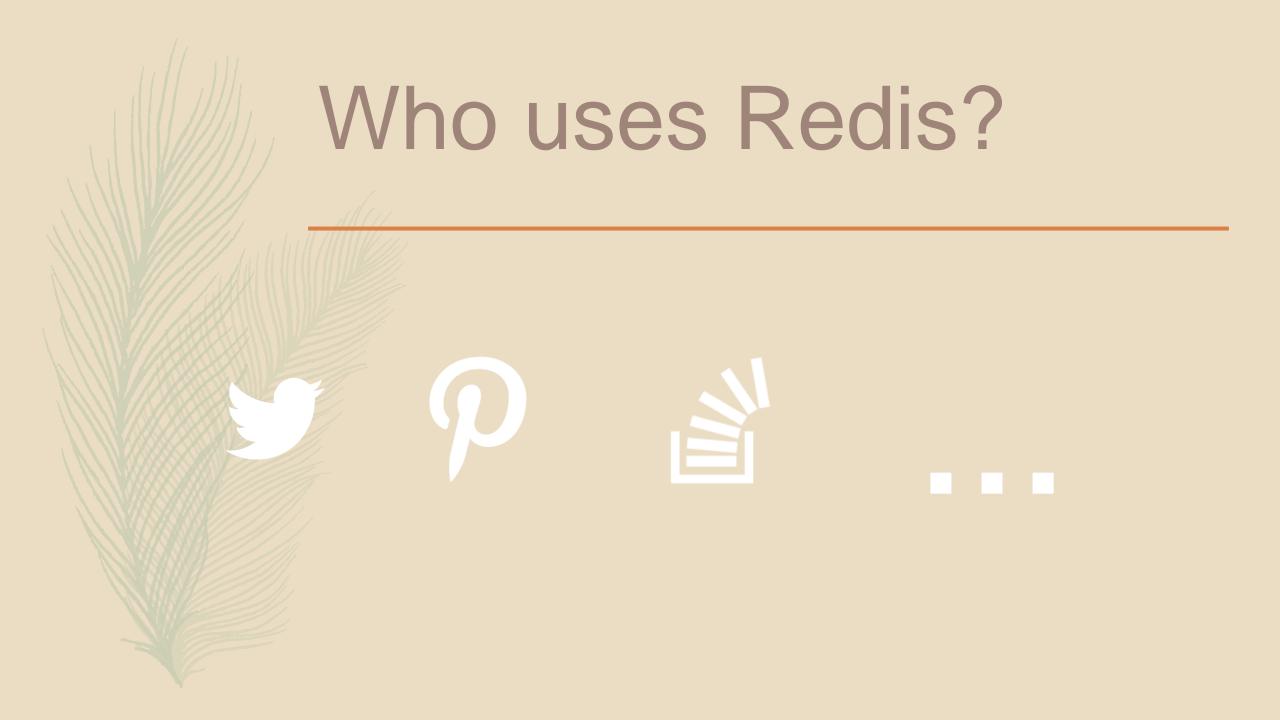


What is Redis?

- Key-Value Store
- Memory-based
 - which means...
 - very fast read and write!!!
- But with periodically flushing to disk, so you enjoy all the goods.
- Simplicity





Begin Redis

String

- The simplest data type in Redis
- It can be anything.

String

- Binary safe
- And ideal for:
 - Plain strings
 - Full JSON objects

- Commands
 - SET [object-key][value]
 - GET [object-key]
- With expiry.
 - SET [object-key][value] [expiry]

Other Types

- List
- Hash
- Set

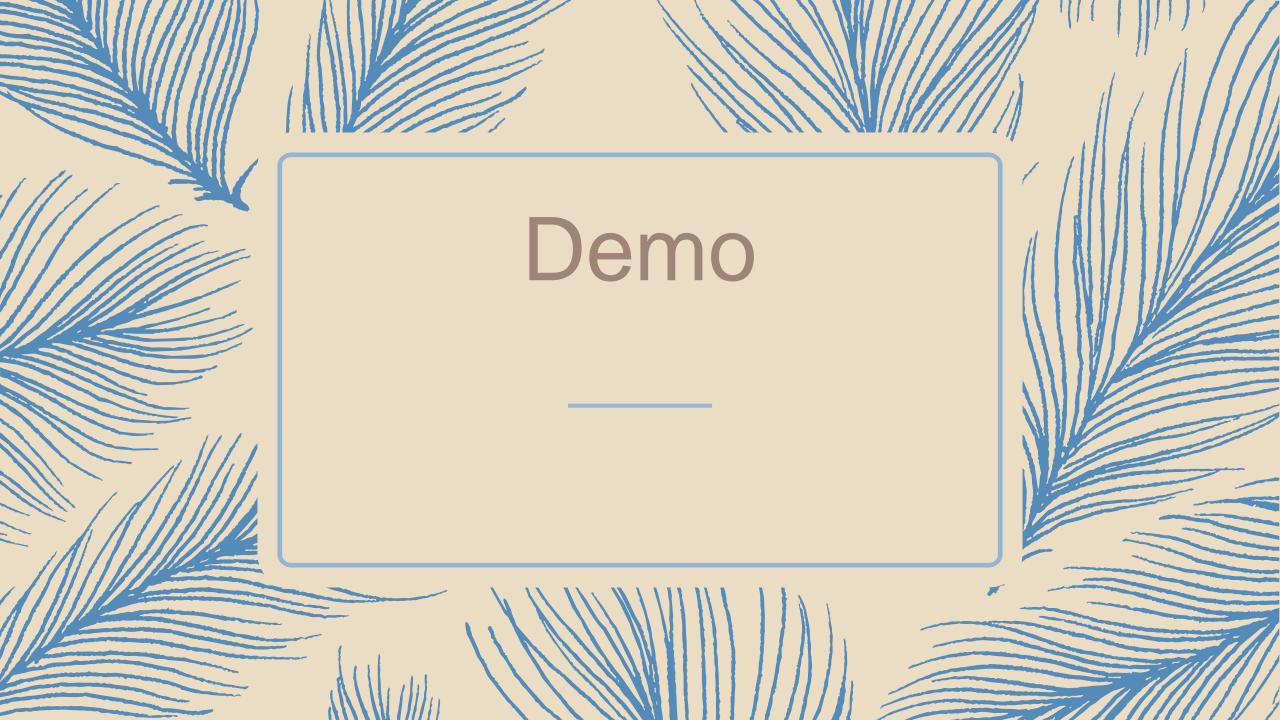


1. Cache

- A degree of data staleness is acceptable
- Some data doesn't need a full-fledged RDBMS

2. Session

- Session data can be stored outside the web server machine
- We can deploy/remove machines without affecting session data currently being used



How Jetabroad Use?

 Move search results originally stored in web server machine memory to Redis.

Settings

- Load Model:
 - = 150 requests/minute -> 2.5 requests/seconds
 - 4 Mb/request (need to be cached)
- Cache Settings: 30 minutes expiry
- Original Search Response Time: 11 ~ 13 seconds

Results

- Resource Consumption in the Redis instance:
 - CPU: ~4%
 - RAM: ~18 Gb
- Search Response Time
 - insignificantly increased

Think about it...

- Type of usage. Persistent/Temporary data store or Cache?
- Data Capacity Plan

Think about it...

Eviction Policy

- Least Recently Used (LRU)
- Redis provides flexibility on eviction policy to use.
- "noeviction", "allkeys-Iru", "volatile-Iru", "allkeys-random","volatile-random", "volatile-ttl"
- http://redis.io/topics/Iru-cache

