Redis

Caleb Philipsek and Cole Reimer

Github Repository

https://github.com/COLEREIMER/Redis-Final-Project.git

Background

- Started by Salvatore “Antirez” Sanfilippo in 2009
  - Supposed to be a better way to scale his startup
  - Became open source soon after
- Remote Dictionary Service
  - “Online Hashmap”
  - Holds and accesses all data in memory
  - Stores data to discs
- Very popular database today
  - Websites like Twitter and Github use it
  - Easy to scale

Benefits

- Variables can take up to 1GB of storage
  - Both key and value up to 512mb
  - Ints, strings, lists, maps, JSON, sets, etc.
  - Stored in memory, backed up to disc
- Hash-based data structure
- Tons of built-in functions for data storage and manipulation
  - Usual CRUD ops
  - Different functions to manipulate only integers, strings, lists etc
- Easy to replicate data to other servers
- Supported by many major languages like Java, C, Python and Javascript

Differences

Redis

- Syntax
  - Get (key) to get a specific value
  - Get works for every bit of data stored
- Memory Intensive
  - Stores all relevant data in memory
- Hash-map based data-structure
- More meant for quick searches and indexes before asking a different DBMS

MySQL

- Syntax
  - SELECT FROM WHERE to get a specific value
  - Joins to get data from different tables
- More disc-intensive
  - Stores and searches data in disc
- Table data structure
- Robust

Our Site

- Goal: Trimmed/scaled down Facebook clone
  - Using Node.JS for interacting with redis our redis database
  - Basic CRUD operations
  - Hopefully basic filters
  - Get crazy with data and set manipulation
    - How many times a user visits a page?
    - Add users' profiles to a recently visited set?