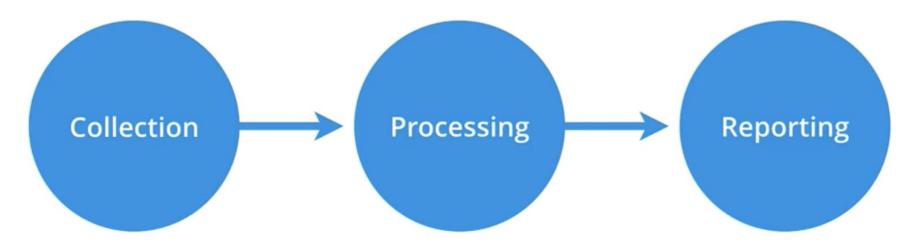
System Design

Google Analytics

What it does?

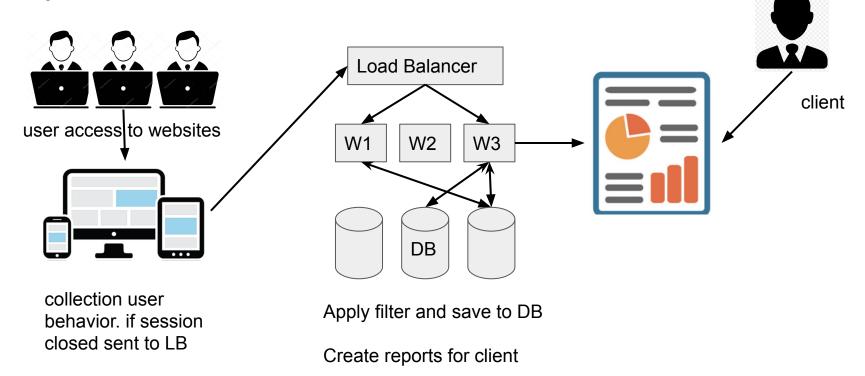


Collection datas from website and write to DB.

Summarise datas from DB and applied to the data as its processed.

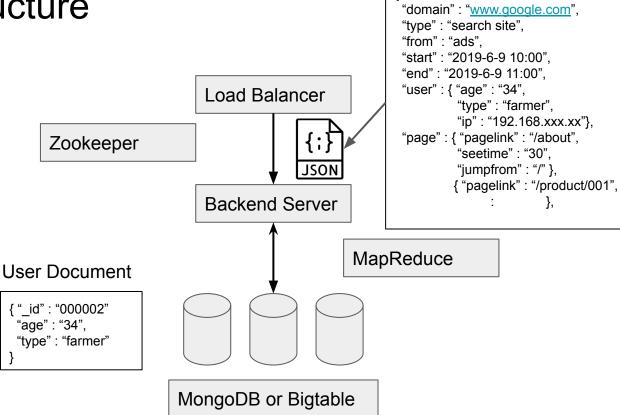
Access the process datas through the web interface.

System Overview



Backend Structure

Session Document



{ "sessionid" : "s0001",

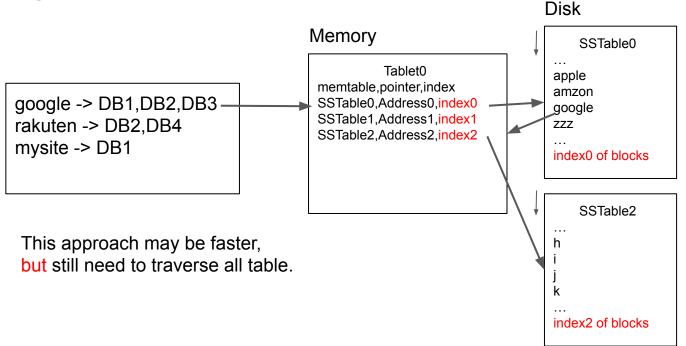
RDB vs NoSQL

Why use non-relational database like MongoDB or Bigtable

- •a lot of reading and writing, a few of update. (once session info writing in DB they don't need changes.
- •Good scalability. (typically, RDB only can be vertical scaling, and vertical scaling have limit.
- More flexible about data. (maybe user access by secret mode or using the onion route that you can't get user info)

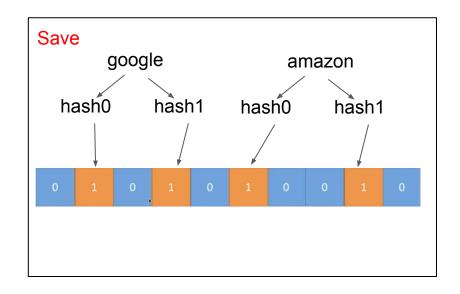
How to make system faster

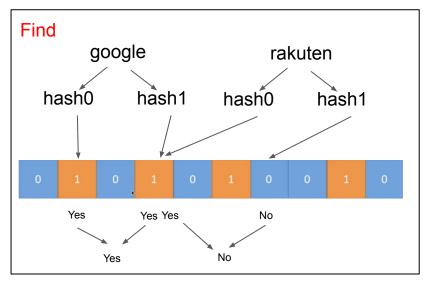
Using Index and pointer



How to make system faster than faster

Using Hash for checking

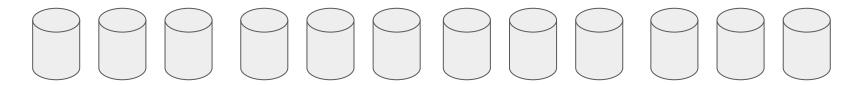




How about the data be bigger?

Because we using NoSQL database, It's easy to be horizontal scaling.

Just buy more storage is fine!



Or make rule like delete data over 6 month for normal user. If you need just buy premium please!!!

How about the data be bigger than bigger?

For instance, we need to show page view-time average for our client

