Last class learning

a) Data distribution using Consistent Hashing
b) Architecture of Google Big Table
c) Data overrunning (Warning Up ← Block & Catch up)
d) Different types of NoSQL dbs

Agenda

a) How data storage works in NoSQL
b) Compaction
c) LSM trees

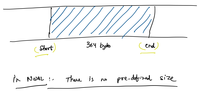
We will start at 9:05 PM

My SQL storage

Table (row)

User id (INT)	Name (Char 256)	city : char(256)
8	256	100

= 364 bytes



In NoSQL :- There is no predefined size

NoSQL storage internals

CF→ Column Family

User id	Friends	Post	Money

① User1 — make a friend
② User1 — Post → post
③ User1 — Post → post

Swing Set

User1 — Friends: Key, Value, Timestamp → Mem table → RAM

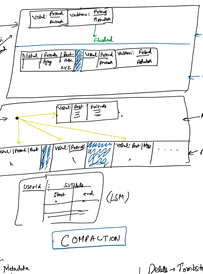
Flushed to HDD

User1 — Friends: Key, Value, Time stamp; Post: Key, Value, Time stamp → HDD

SORTED SET (SS Table) → HDD

HDD → SSTable

RAM (Mem table) → Sorted set in memory


User1 Friend
User1 Friend
Value: Friend Name
Flushed
RAM
HDD
User1 Friend
User1 Friend
User1 Friend