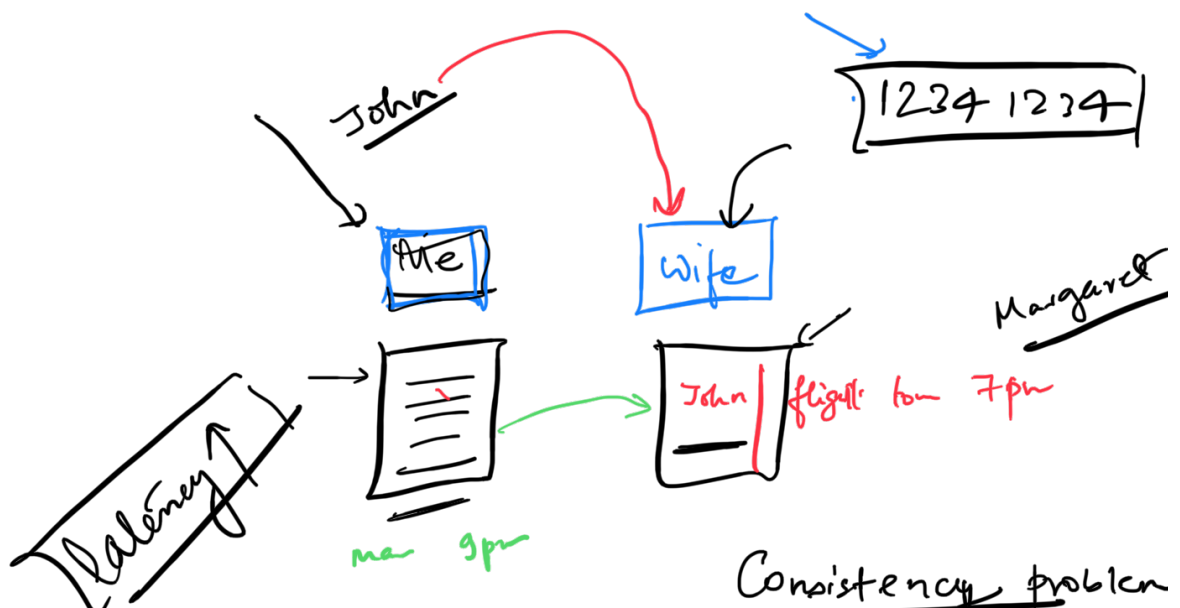
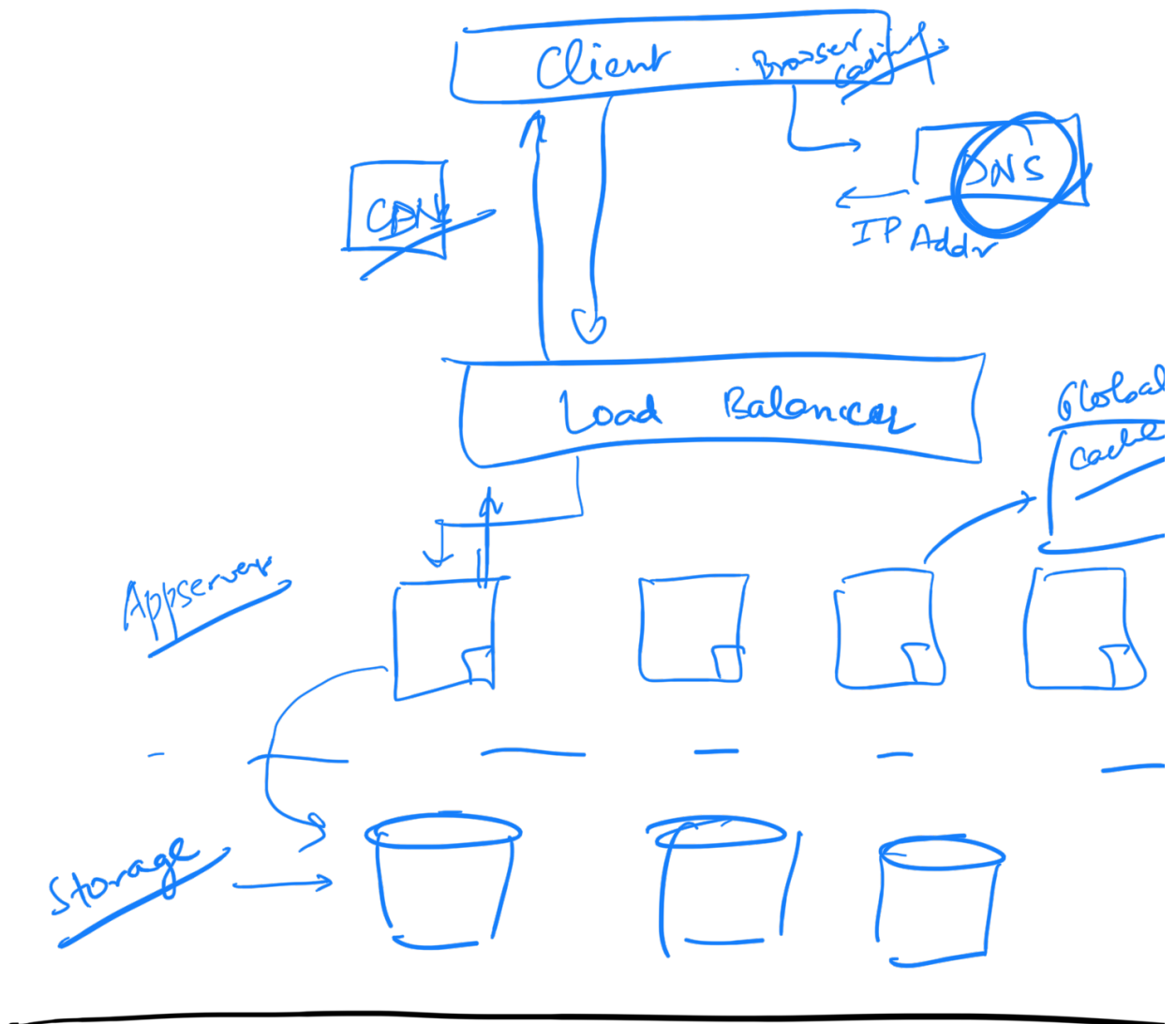
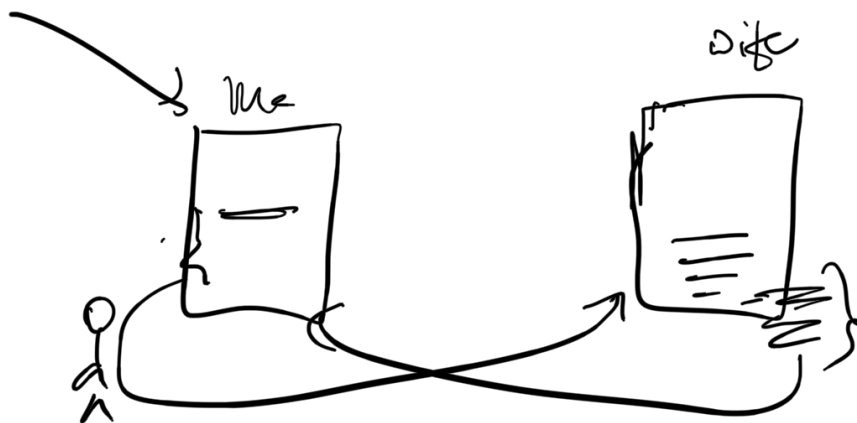
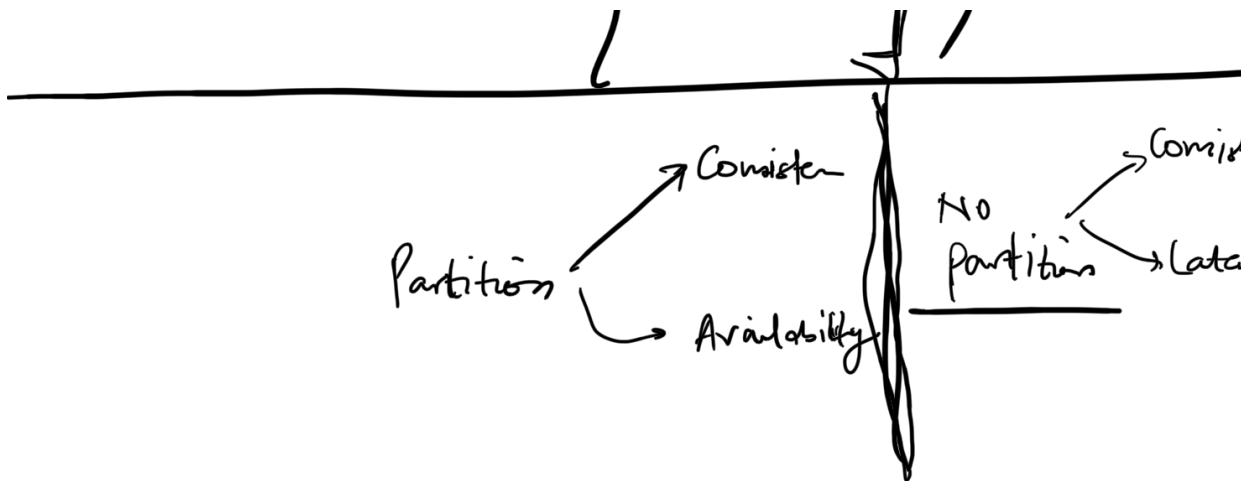


STORAGE LAYER





Userid → { "name": --, "dob": --, "bookmarks": " -- " }

Sharding Key
Master slave

(K)



- ① De-normalize
- ② (K) → []
↑ only 1 me for most request

- query bank balance (accountId)
- pin (accountId)
- bank statement (a, period)

branchId



- credit money (~~acc~~ accountId)
- debit money (accountId)
- change branch (accountId, x, y)



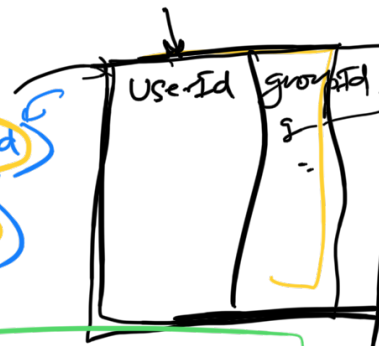
① write down frequent use cases

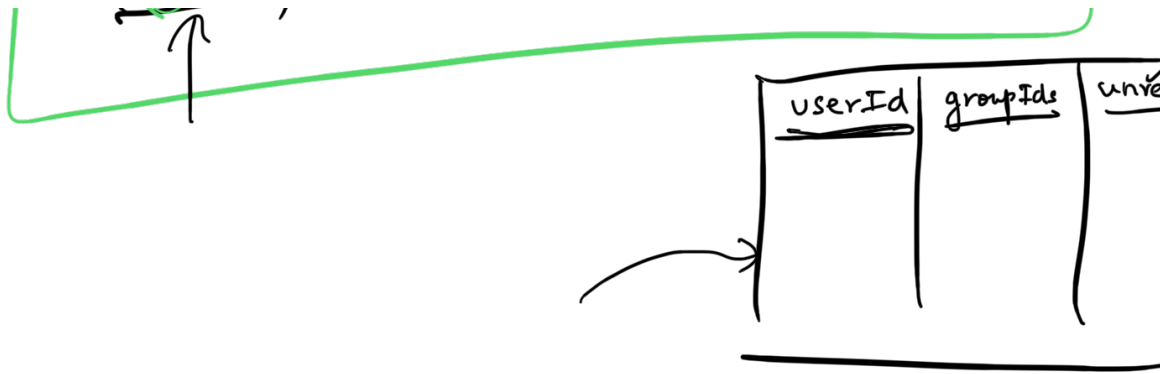
↳ API

② figure out what's common

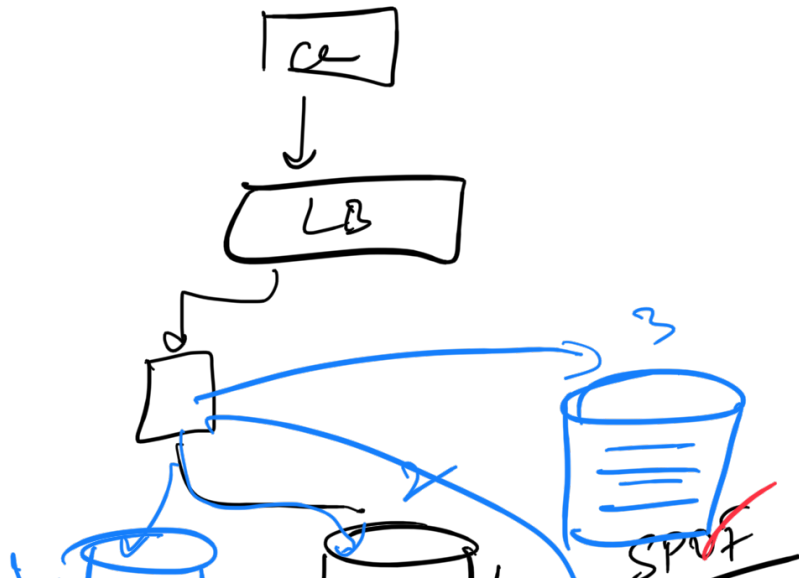
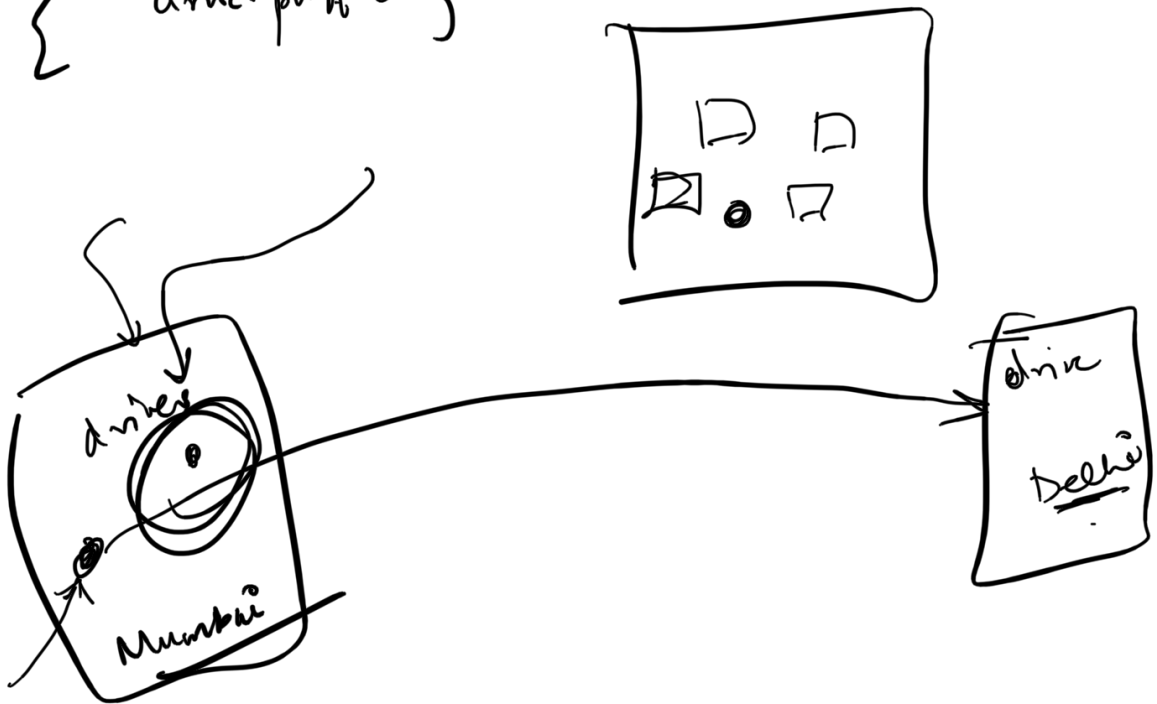
↳ candidate for sharding etc.

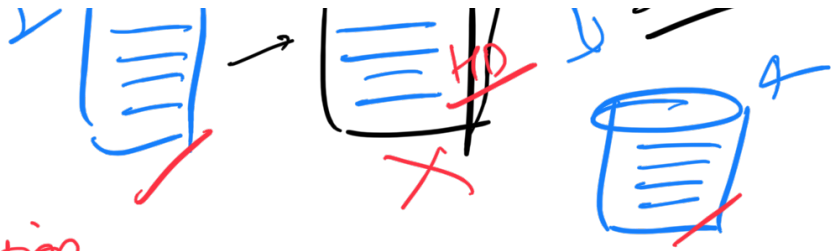
- getMessage (groupId)
- sendMessage (groupId), " ", sender, " "
- readMessage (0, " ")
- getConversations (userId)
- getUnreadMsgs (userId)





user profile
driver profile





① Replication

↳ data loss
Scale Q/L
Be more available



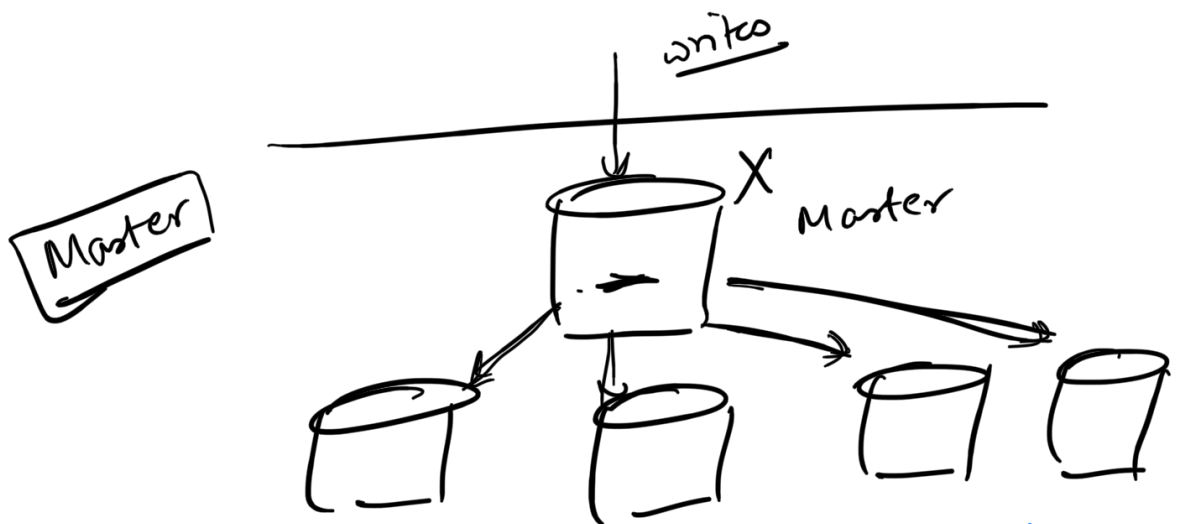
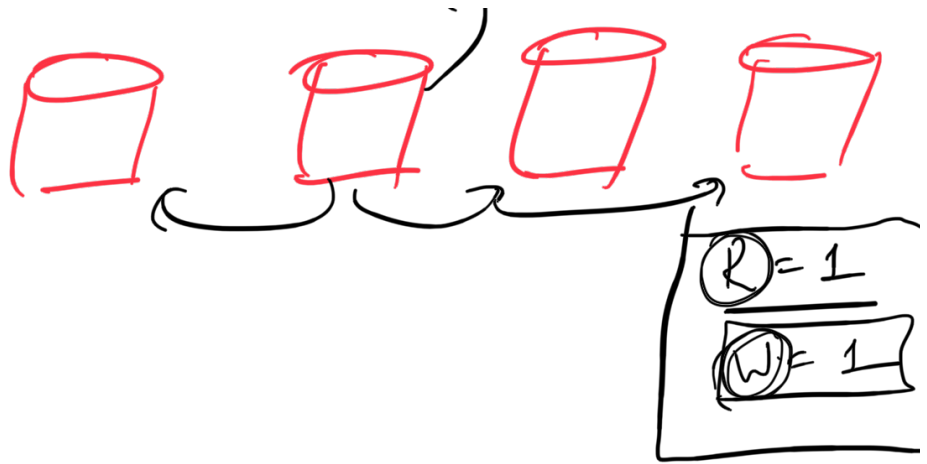
$R+W > \text{Total \# of machines}$

W ← # of machines where write is successful & I return success
R → # of machine from where I should sir read.

Read from any machine



✓ Score+

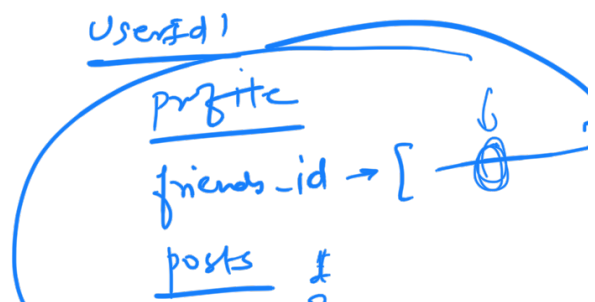
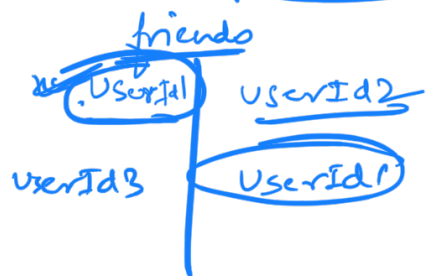


SQL db.

NoSQL

→ MongoDB
→ Cassandra

Kafka



getfriends(userId)

