Digital Wallet

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the single version is simple:
transact from one user's digital wallet to another user's digital wallet
So the main idea of this chapter is how to build reliable distributed system
atomic transaction

1 Step 1

Transaction Per Second (TPS) is high
So we need distributed storage

2 Step 2

Propose High-level Design
API design POST balance transfer from one account to another
Sharding solution: several redis, each performing 1000 transactions
if two users are in two different redis, how to ensure it is atomic (succeed in both DB)
can also use relation db, each DB satisfies ACID
but it also needs to ensure atomic between DBs **solution**:
use 2 phase commit
or try-confirm/cancel operation