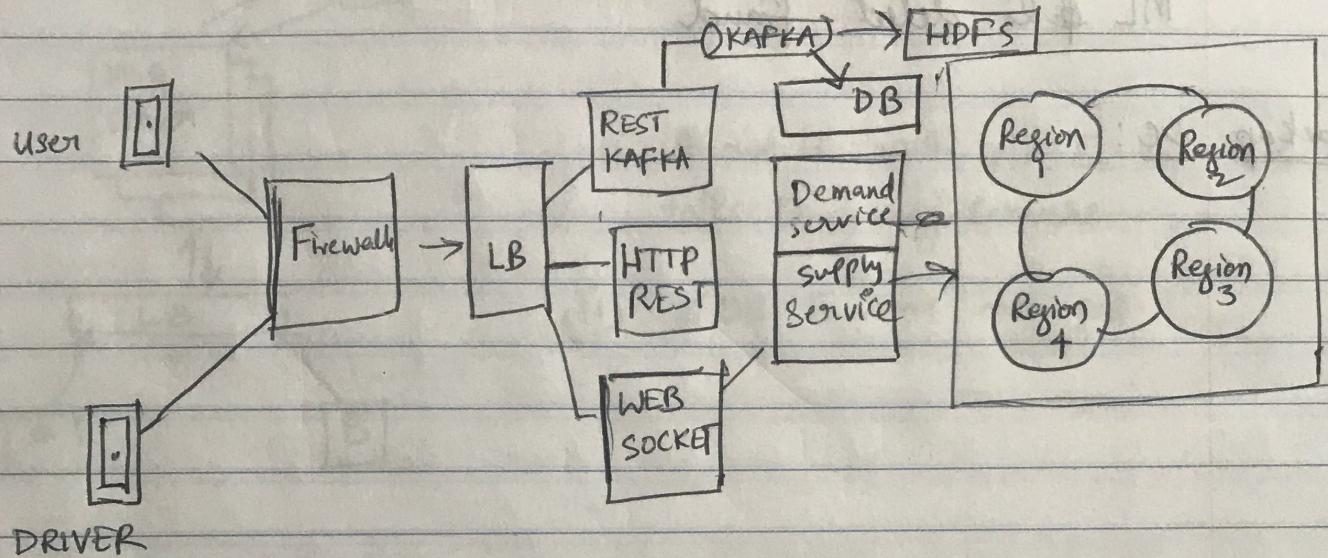


UBER/Lyft/OLA System design.

Cabs (C) are Supply and user (U) is demand

- every few seconds C sends location info to Uber's Kafka REST API. Kafka is behind a load balancer. From kafka it is also sent to HDFS, DB, etc.



① Demand service calls Supply service with location and car size info to get available drivers at that location.

② Supply service finds the drivers

 └ Calls Region server.

 └ Region server finds all cabs in a given radius around that locatⁿ. Google Maps provides libraries to return location info by cells. Where regions^{locations} are divided into tiny cells. The Region server finds cabs in these cells.

 └ Region server calls maps ETA service to find best matches.