

# — PROJECT SUBMISSION —

LetsUpgrade

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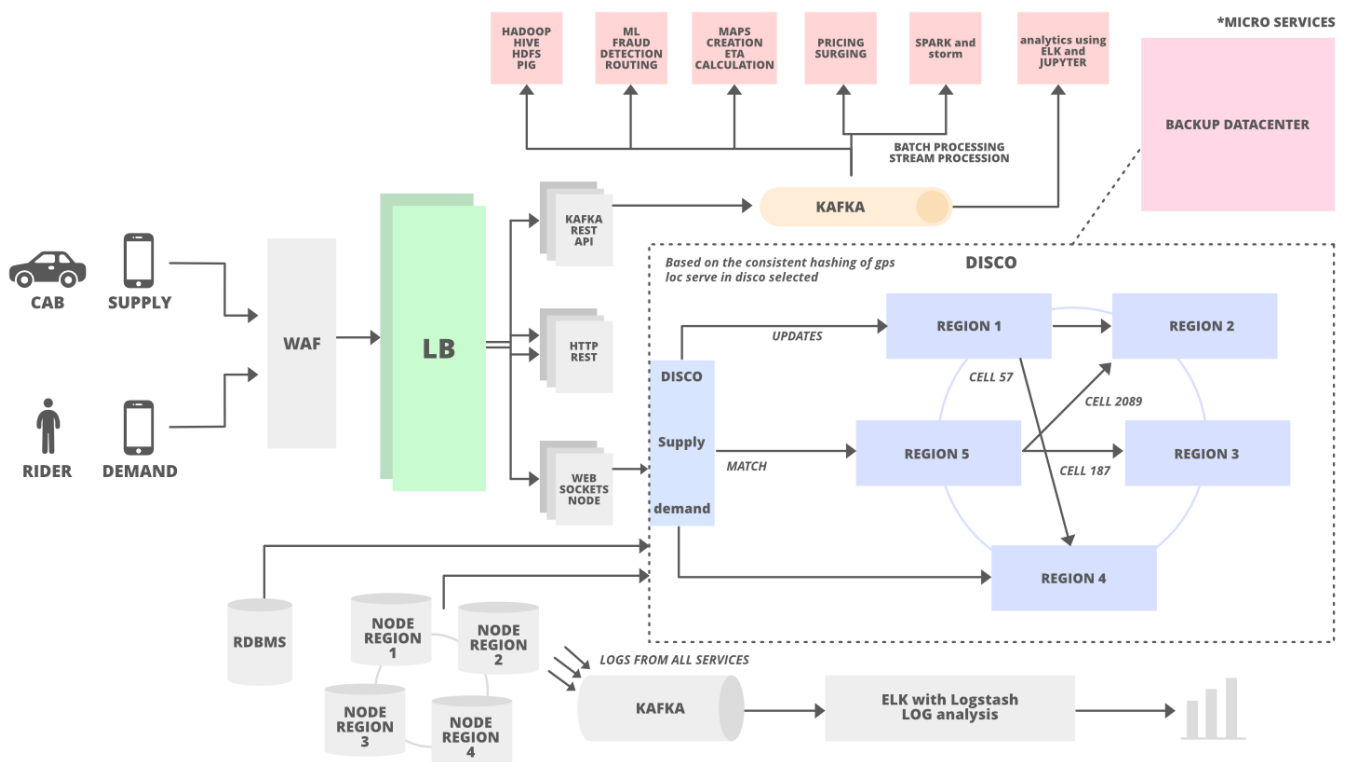
## “System Design: Zero to Hero”

**Project: Driver Location System in Uber by taking a different number of active drivers.**

**A1:**

### UBER DESIGN SYSTEM:

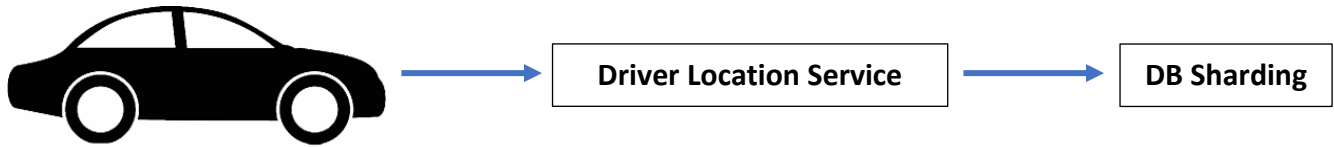
Uber is a user-friendly app for rides. A user can request a ride through the application and within a few minutes, a driver arrives nearby his/her location to take them to their destination. It also offers food delivery & cargo services.



Source: GeeksforGeeks

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### Driver Location:



### Raiders:

- Total Users: 93 Million
- Rides per Month: 30 Million

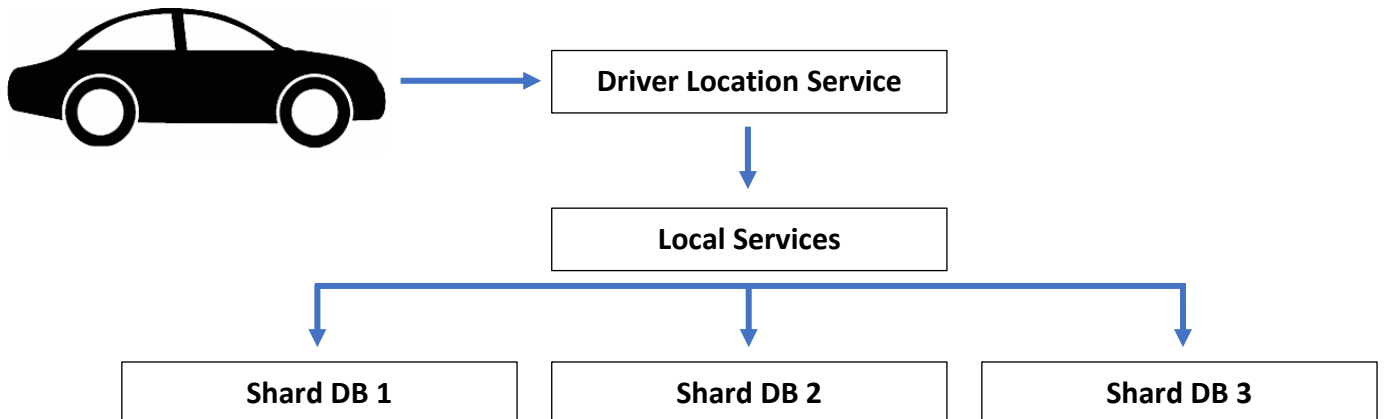
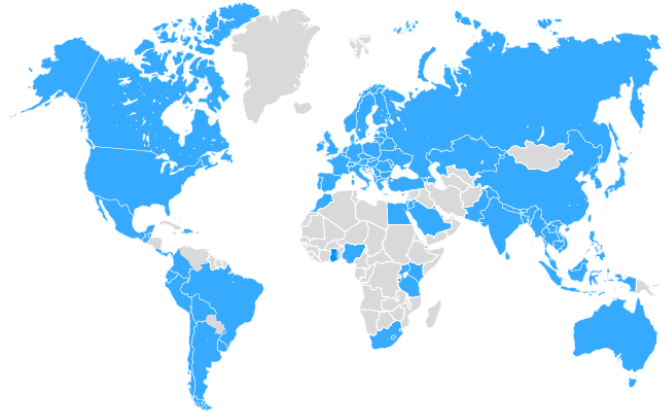
### Drivers:

- Total Drivers: 3.5 Million
- Drive Shift: 12 Hours

### DB Sharding:

- Mapping Custom Areas as Shards
- No Uniform Distributions of Data

### Uber World Map



### Raiders:

- Total Users: 93 Million
- Rides per Month: 300 Million
- Active Requests:  $(300 \text{ M}) / (30 * 24 * 60) = 6944.44 \text{ Active Requests/min.}$

### Drivers:

- Total Drivers: 3.5 Million
- Drive Shift: 12 Hours
- Total 2 Shifts:  $(3.5 \text{ M}) / 2 = 1.75 \text{ Million Active Drivers}$