

System Design :-

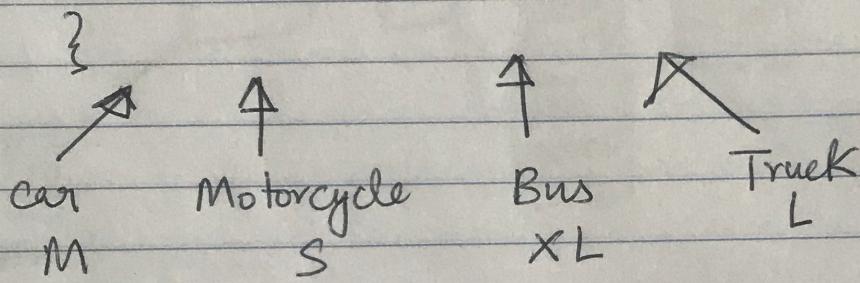
Parking Lot :

Spot size : S, M, L, XL : Small car can park in spaces bigger than it. (M, L, XL)

Available spots can be placed in their own stack.
or in a map where key is size.

Vehicle design

abstract Vehicle {
string licensePlate;
enum color



ParkingLot design :-

methods

- Spot : placeVehicle (Vehicle) → add vehicle to hashmap with key as licensePlate, value as spot.
- Spot : removeVehicle
 - Remove from map and return spot to available spots map.

Spot

advanced questions:

- lot has multiple entrances. can lead to race conditions at assigning parking spots.
- Pricing : Price same or higher for bigger size cars.