

Design Parking lot

```

1) Parkinglot {
    String Parkinglot Id;
    int nooffloors;
    int no of Slot per floor;
    List <Parking Floors> parkingfloors;
}
    
```

```

2) ParkingFloors {
    List <Parking Slot> parkingslot;
    void addParkingSlot();
    void RemoveSlot();
}
    
```

```

3) Parking Slot {
    int floor Id;
    int slot Id;
    Vehicle vehicle;
    boolean isfree;
    VehicleType vehicletype;
}
    
```

```

4) VehicleType {
    Car
    Truck
    Bike
}
    
```

5) Vehicle {
 VehicleType vehicleType;
 ParkingSlot parkingSlot;
 String TicketId;
 String RegistrationNo;
 }

6) ParkinglotDataRepository {
 List <ParkingSlot> parkingSlotData;
 List <ParkingFloor> parkingFloorData;
 List <ParkingSlot> initializeSlot (int noOfSlot);
 List <ParkingFloor> initializeFloor (int noOfFloor, int noOfSlots);
 }

7) ParkinglotService {
 Map <String, Vehicle> TicketVehicleMap;
 Parkinglot parkinglot;
 ParkinglotDataRepository parkinglotDataRepo;
 void createParkinglot(Parkinglot parkinglot);
 void parkVehicle (vehicleType, vehicleNo);
 void unparkVehicle (String ticketId);
 }