Requirements

1. Parking Lot should have multiple floors
2. Parking Lot should have multiple entry and exit gates
3. It should support parking of multiple vehicles- two, four, heavy
4. Ticket must be generated at entry gate
5. Payment should be done at exit gate through different modes- cash, card, upi
6. Payment can be done on hourly or minute basis.
7. Parking Space must be allocated close to the entrance gate of vehicle

Objects:

1. Vehicle
2. Parking Lot
3. Floor
4. Parking Space- two-wheeler, four-wheeler, heavy-vehicle
5. Entry Gate
6. Exit Gate
7. GateManager
8. Ticket
9. Payment
10. Payment Strategy

UML Class Diagram

