

that happens
batch in your dashboard

Aug 21 Intermediate

Design a Movie Booking Application

① Overview / Context

② Gathering Requirements

- login and Sign Up (Users)
 - implement using mobile phone No password
- BMS has to support multiple cities
- Every city can have multiple theatres
- Every theatre might have multiple auditoriums
- There can be multiple movies being played across the system at the same time

→ Diff types of seats in auditorium



→ We need to support adding movie -

→ Assume we own all the theatres

→ One seat should not be booked by more
than one person for a show

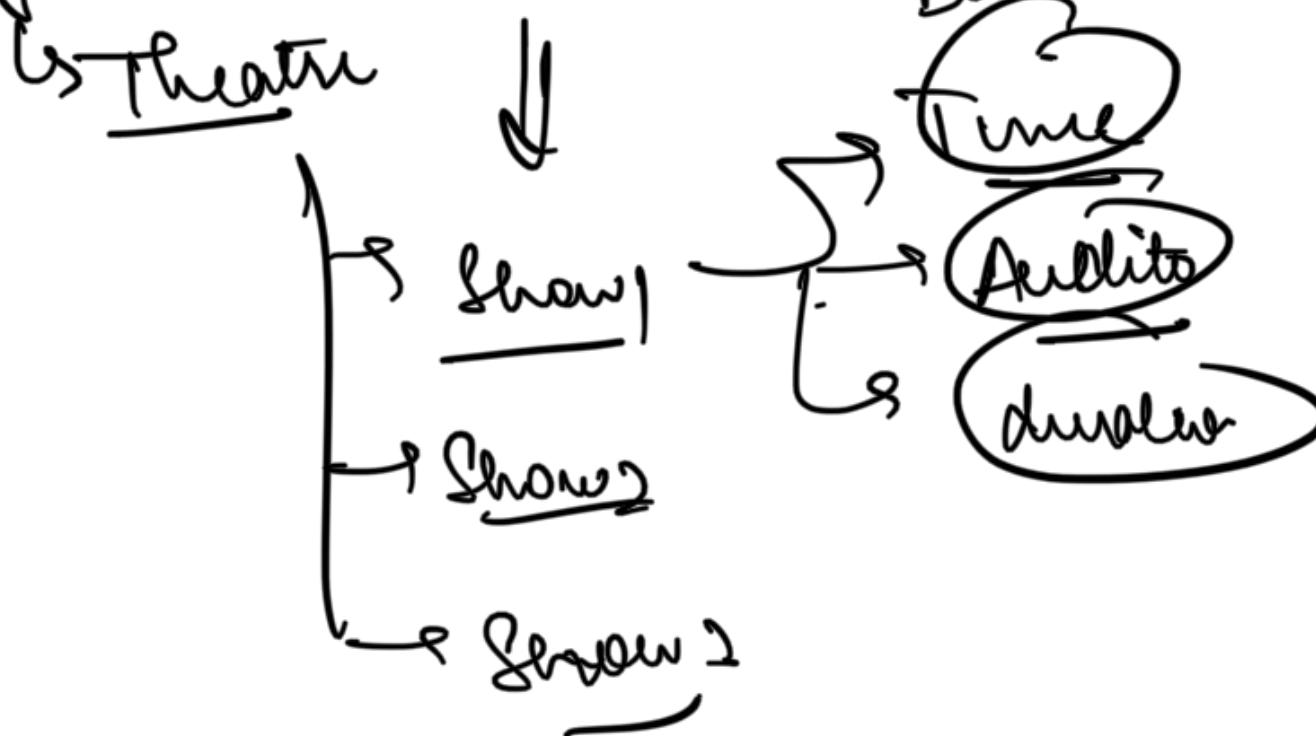
→ Do we have an upper bound on the
 no
 of
 seats per booking

10

→ Payment can be made via CCFDCS / UPI

→ We want to support cancelling a ticket

→ Retry



→ People should be shown available seats and allowed to select seat when they are making a booking

→ No dynamic pricing =

→ Price of a seat is decided by the type of seat and time show -

→ Every show will have diff price for diff type of seat

$$\text{VIP} \Rightarrow 500 =$$

$$\text{Pr} \Rightarrow 300$$

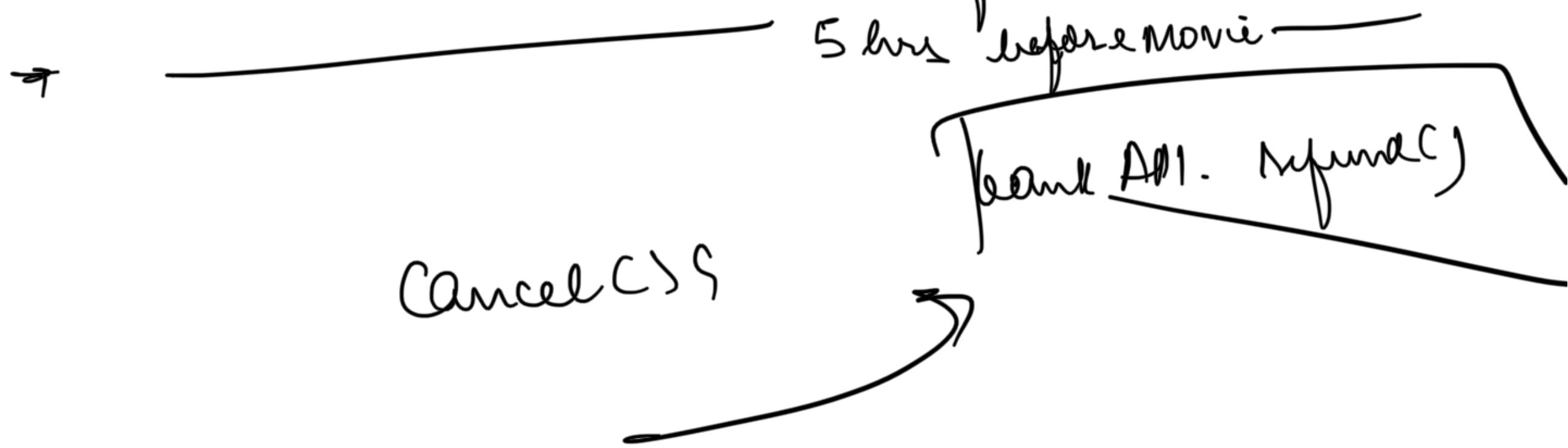
$$\text{Gold} \Rightarrow 250$$

→ If payment not made within 10 min

B I O

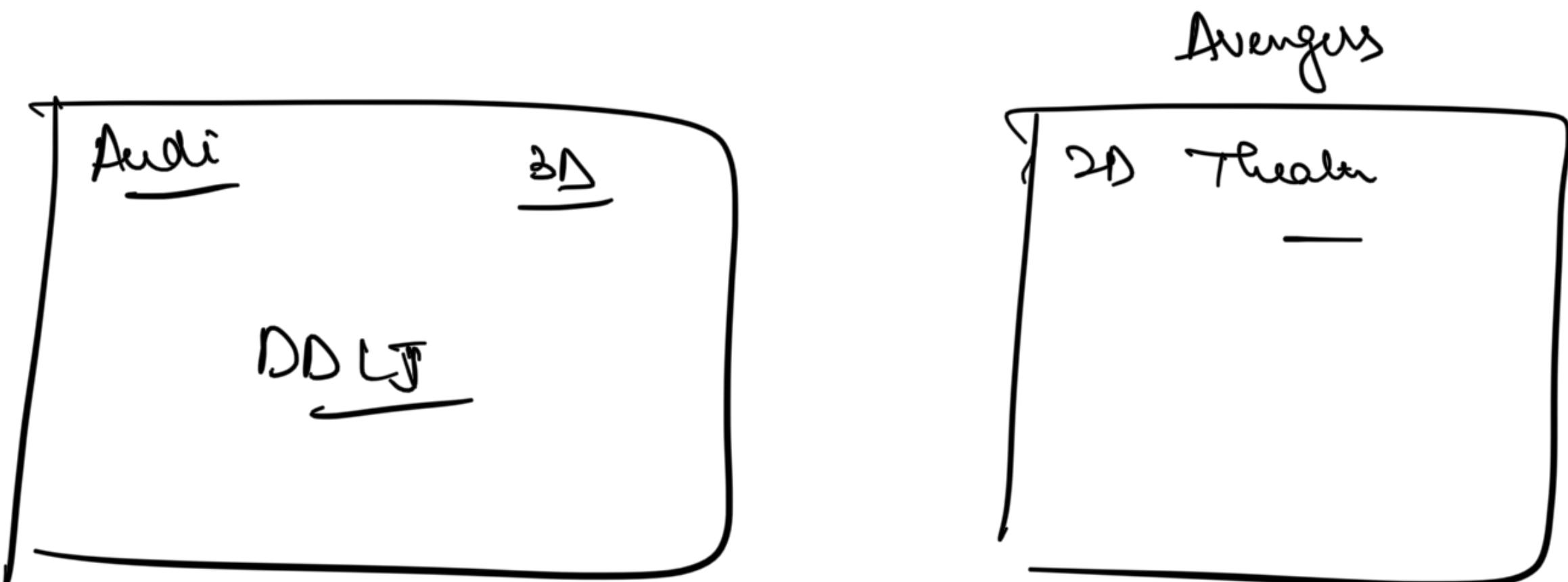
→ Booking is cancelled

→ Movie booking should be allowed only till 20 min
before show



7

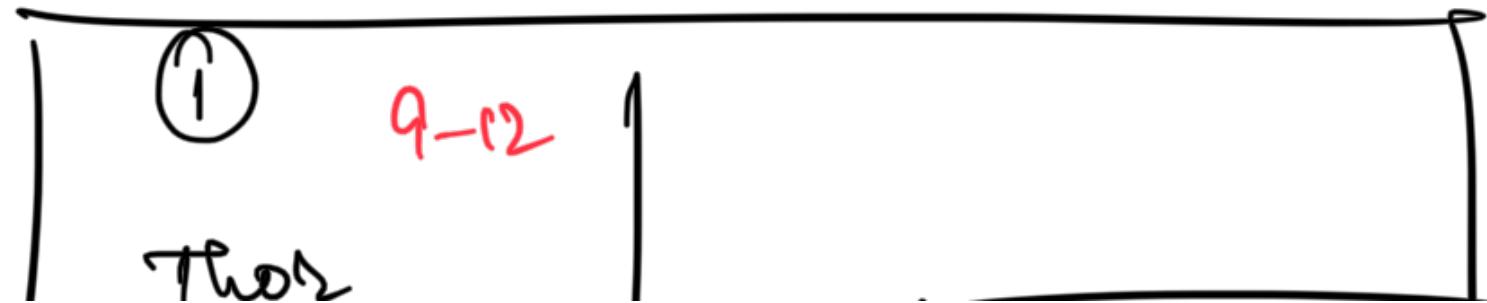
→ We want to support 3D movies

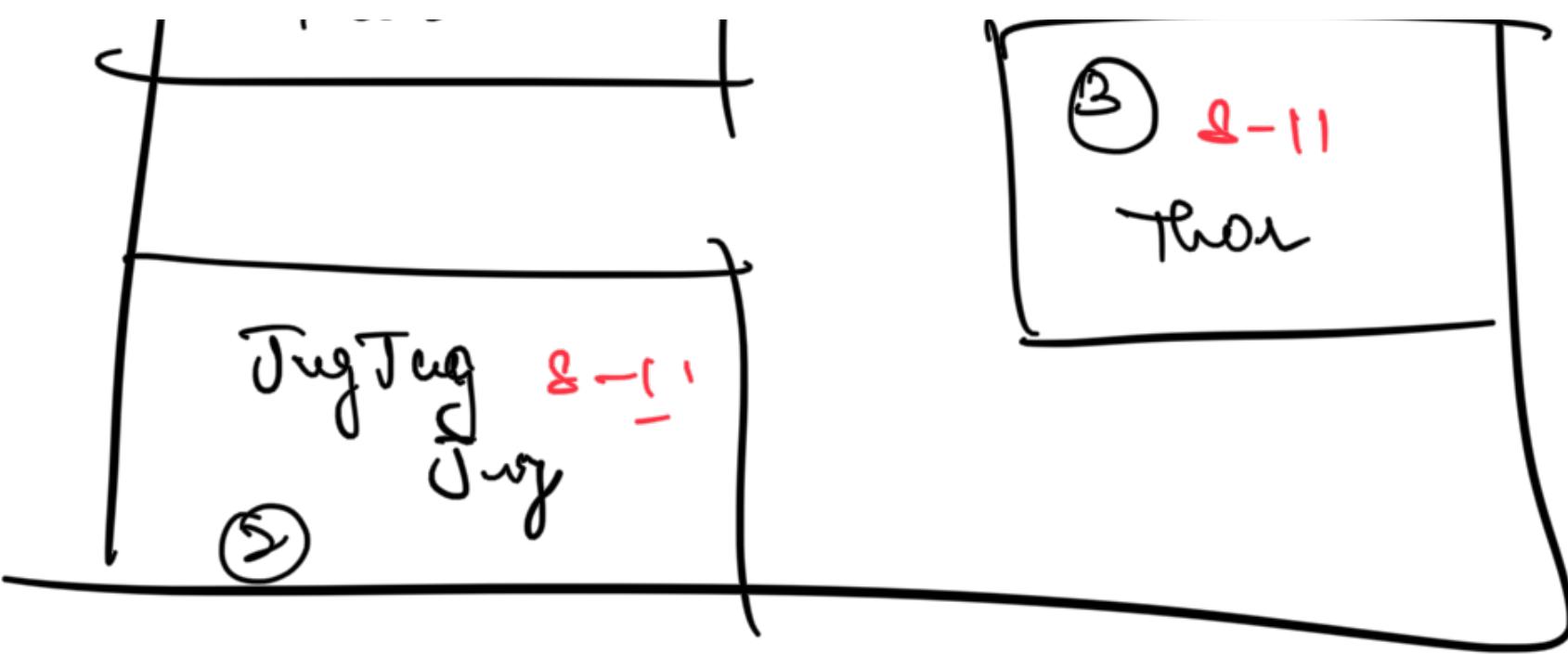


3D, Hindi,
Dolley

→ We only allow booking for 10 days in advance

- 1) figure entities
- 2) figure out behaviour





Show

- Movie
- Theatre
- Time
- Duration
- feature

~ 100

Visualization

10:08 PM

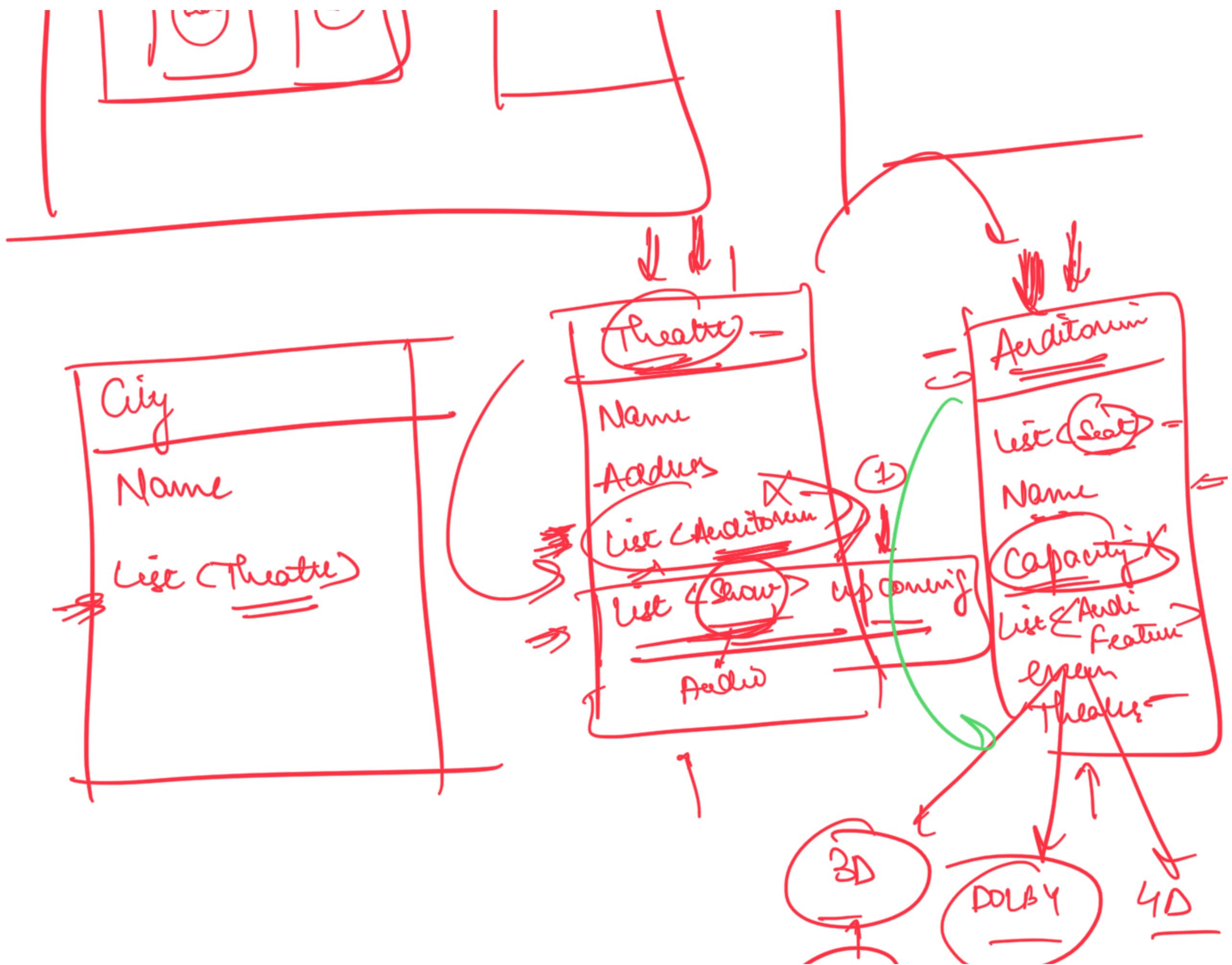
10:05 PM

→ find out ~~writer~~ classes in system
other than the ones already
marked

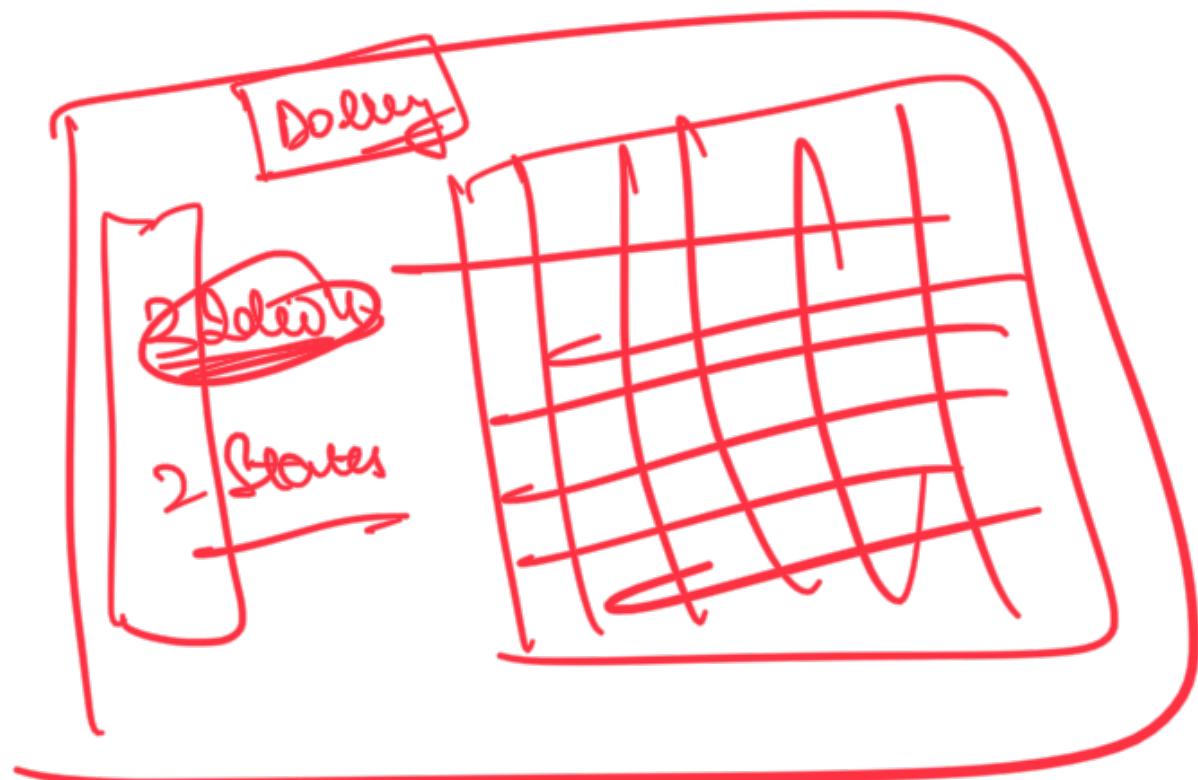
City



Payment



(2D) of
Audio

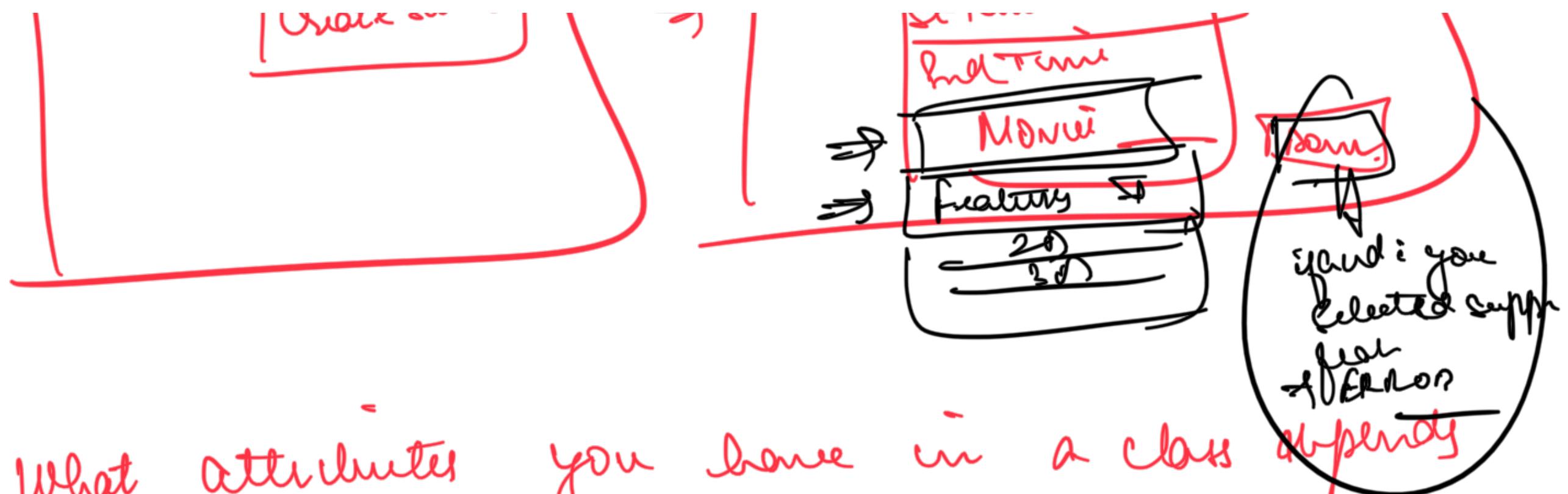


Many from audi
I want to get these

Admin

Tr. to Show

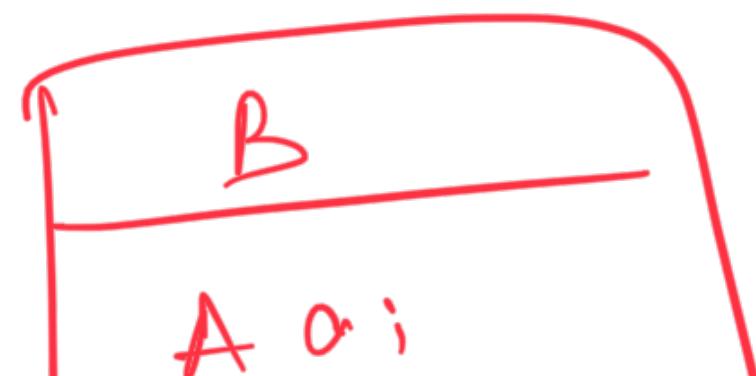


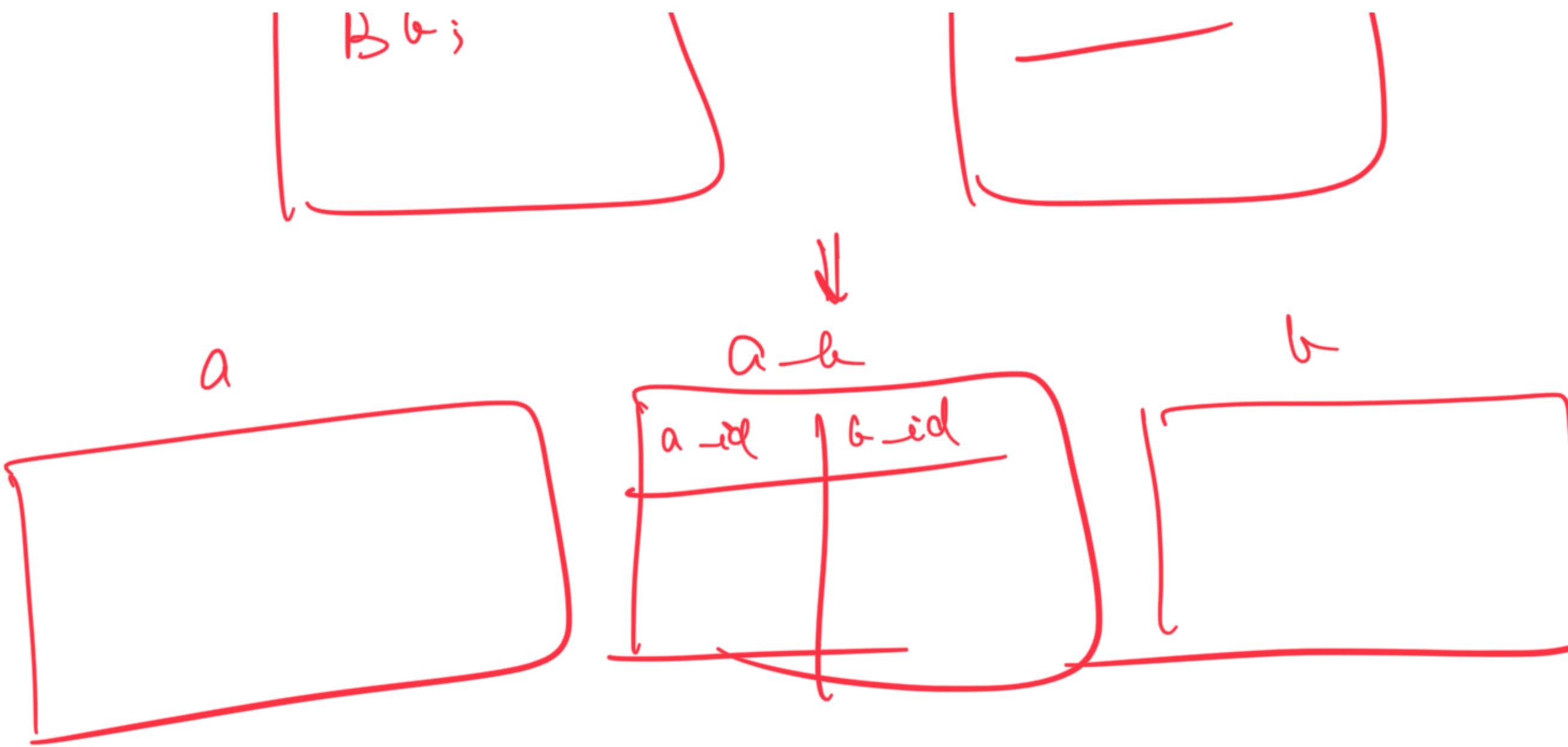


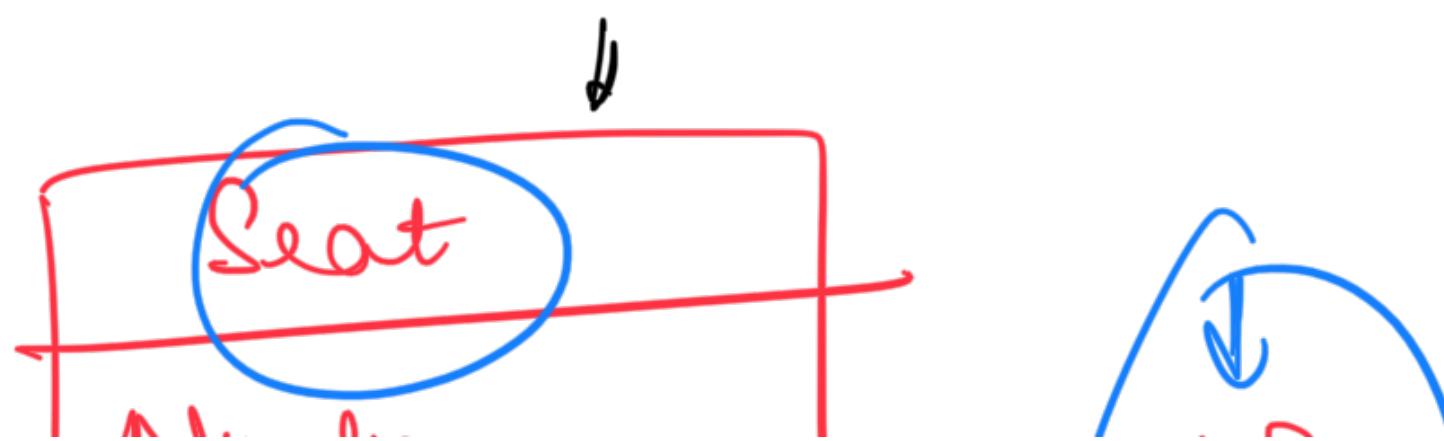
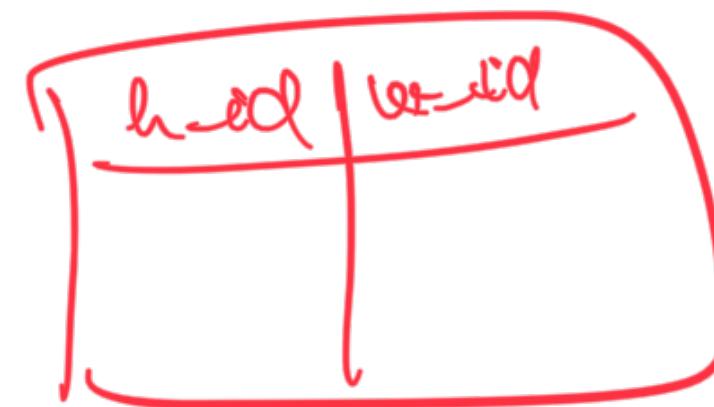
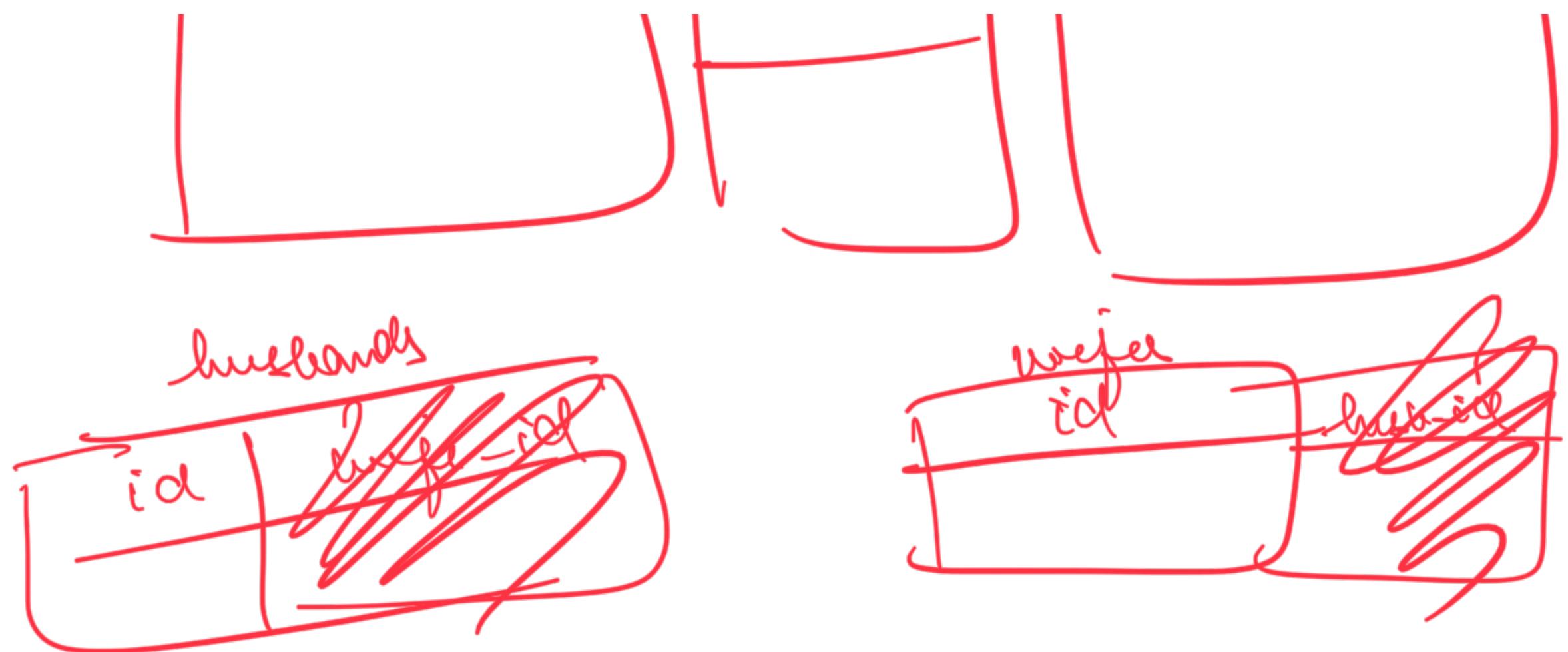
What attributes you have in a class object

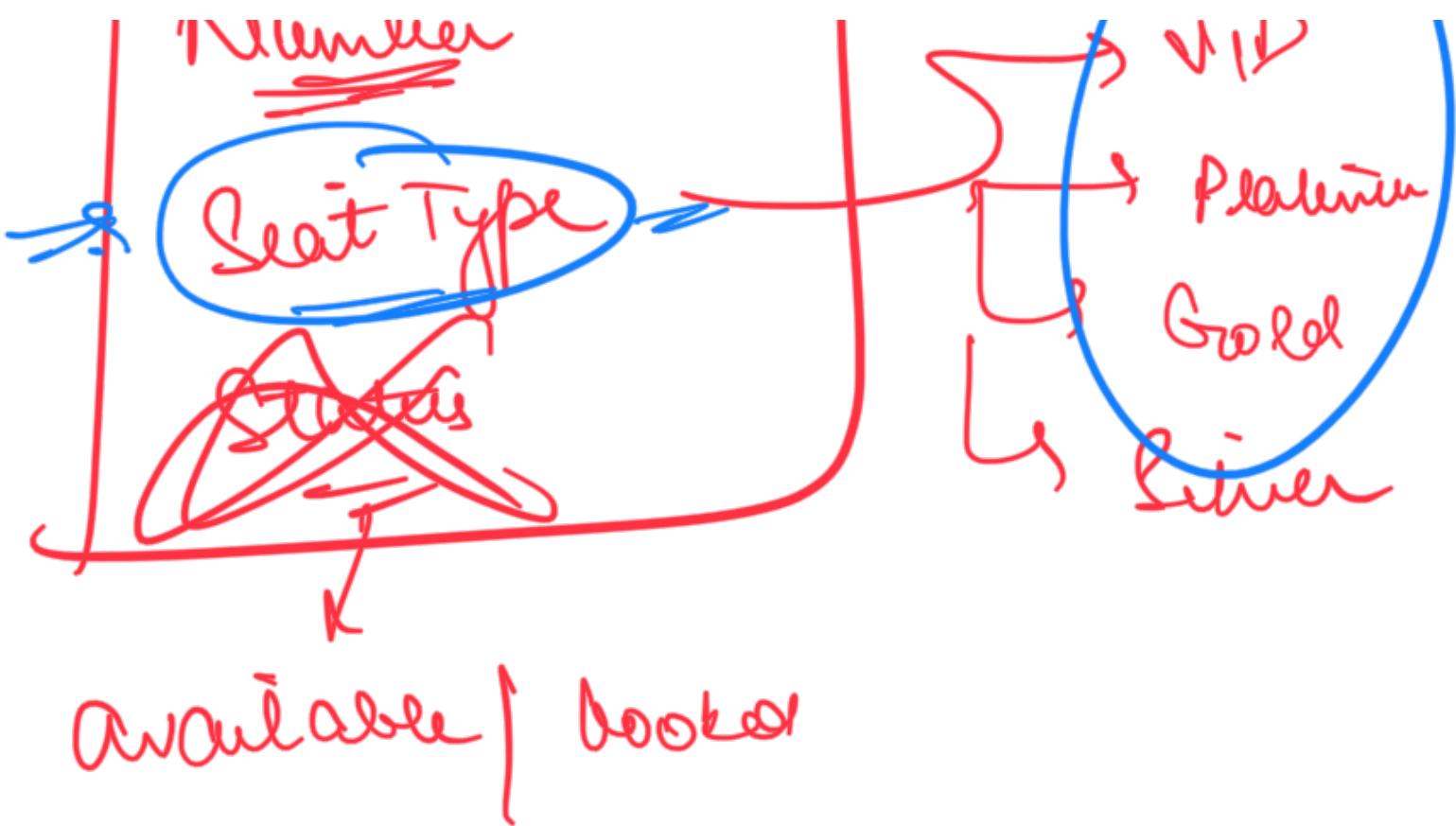
On what access pattern you have in your

app









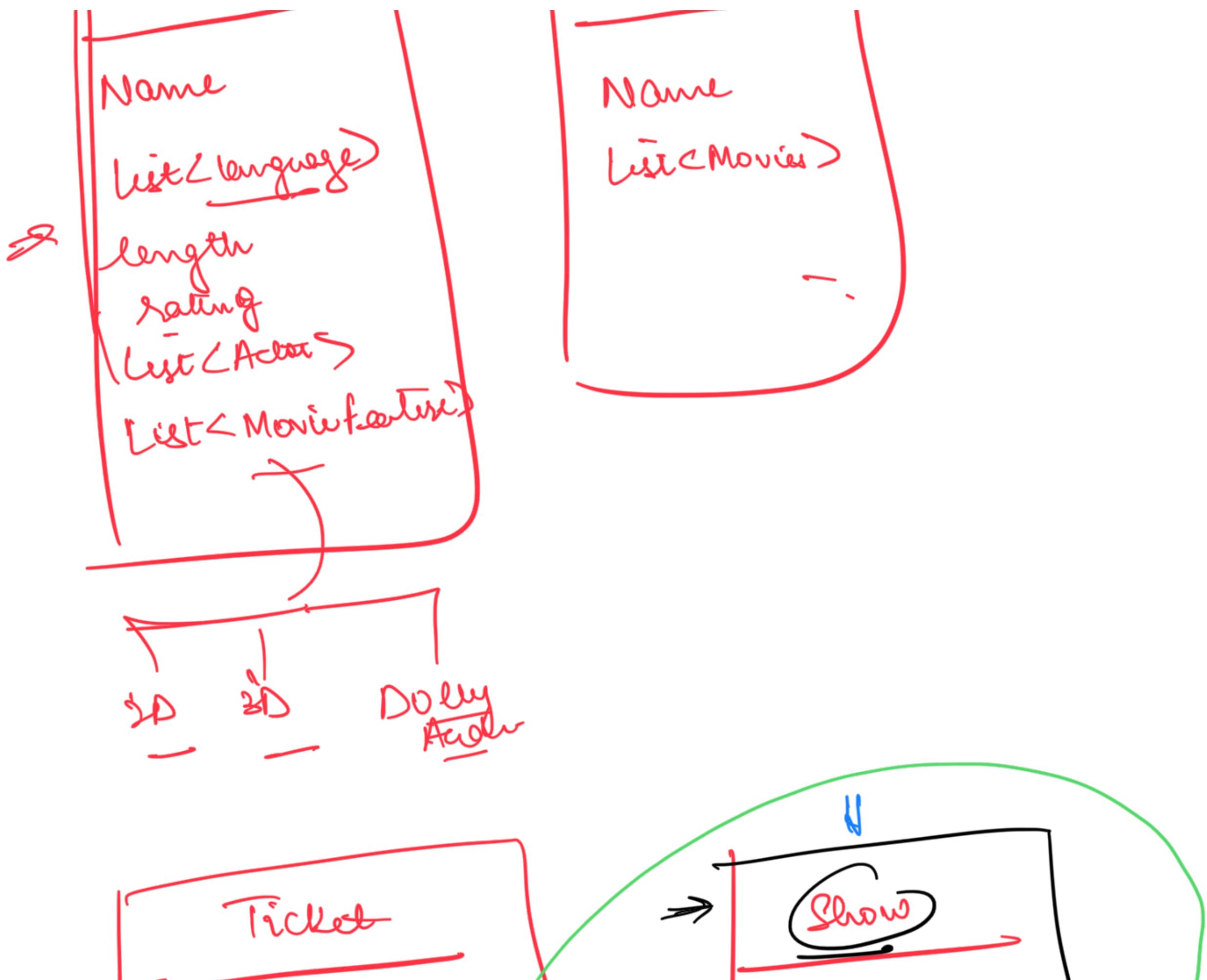
Show 1 9-12PM 3 Foliose 13A
Booked

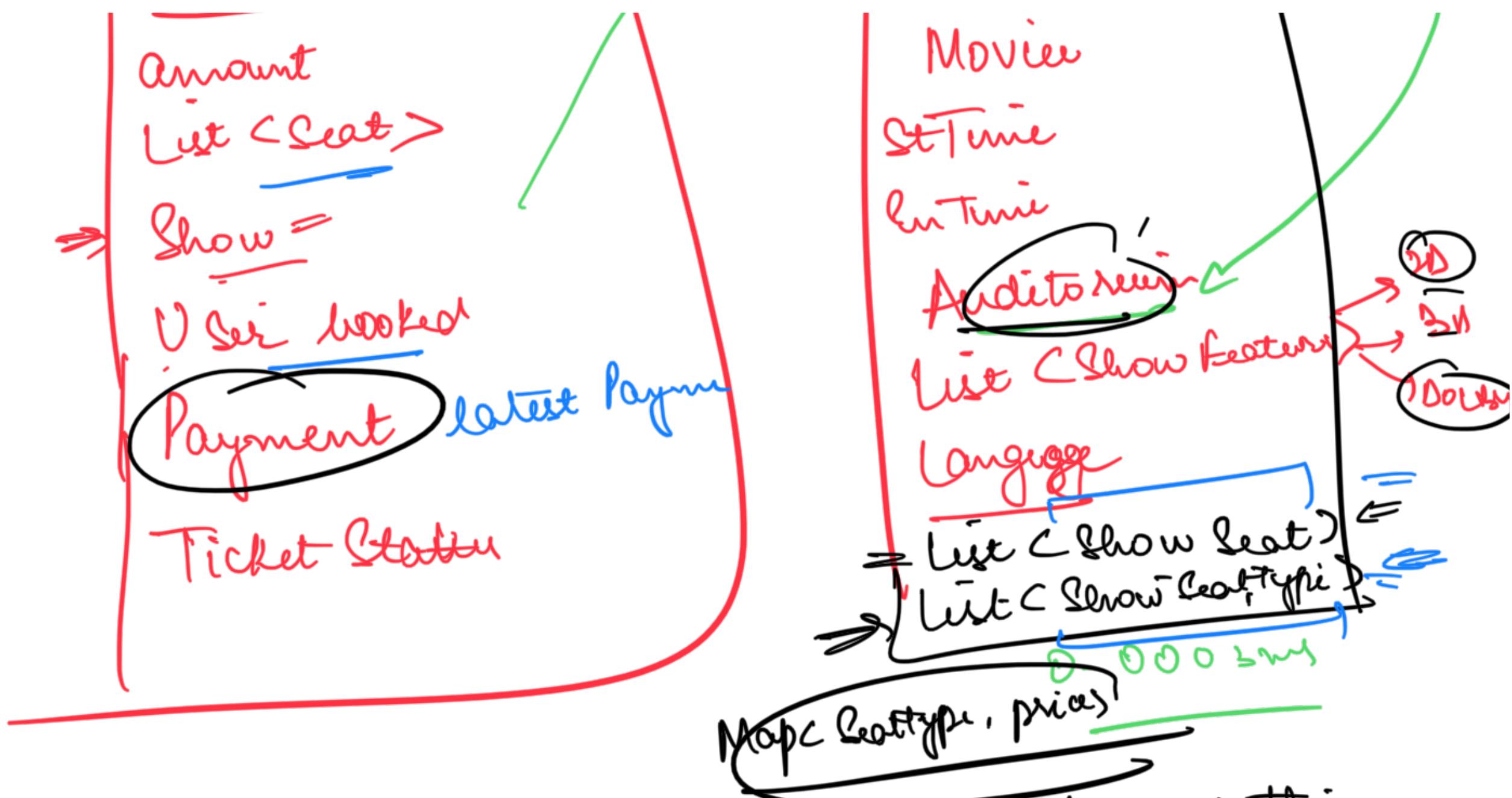
Show 2 12AM-2AM XYZ

→ Status is an attribute of relation of show
test

| | Movie

| | | → ~~Action~~
Action

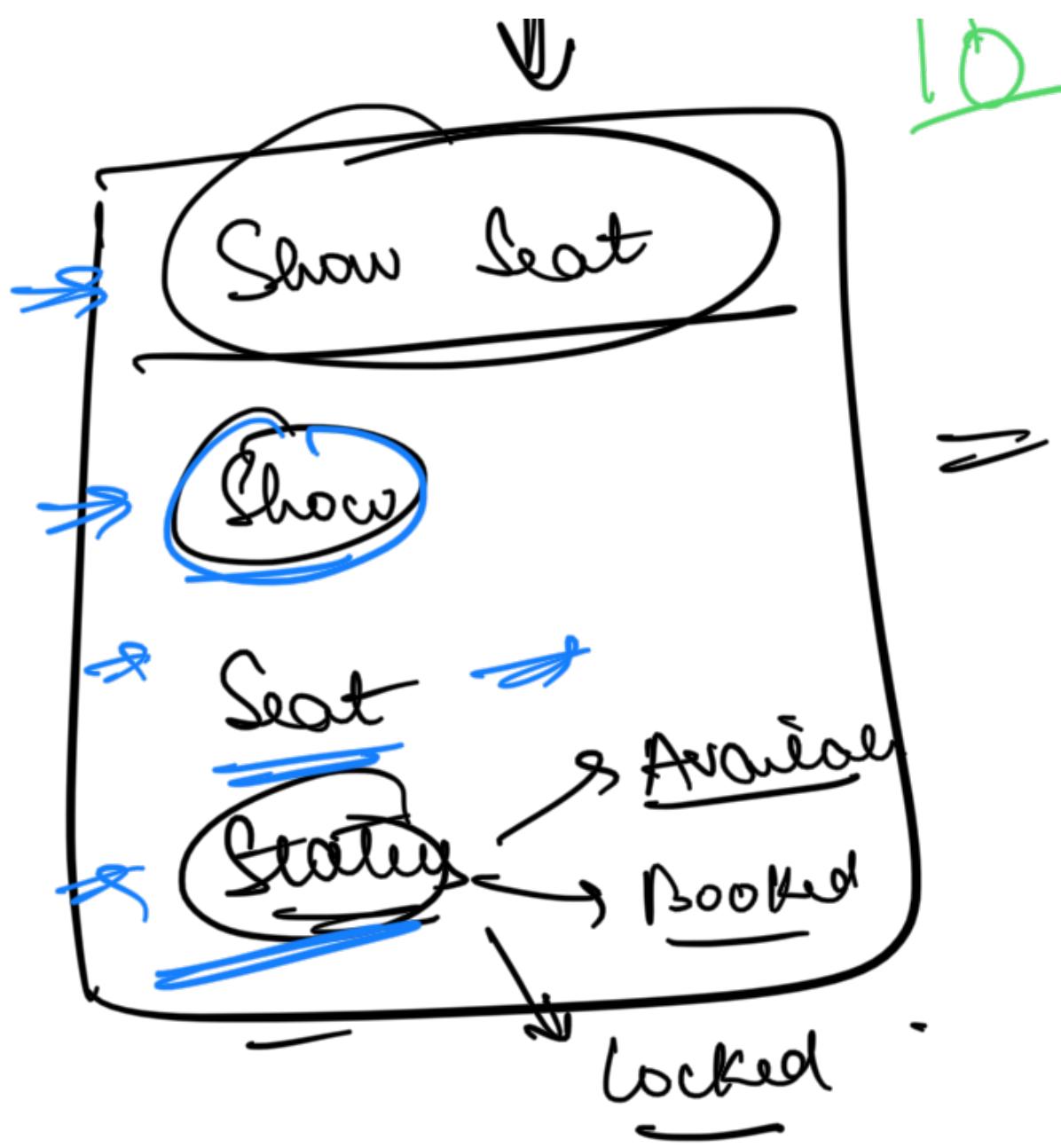




- ① Do we know the sealing status of this show -

13A = Books
14A = Art

② Every type of cat had diff price for every show



~~DO U U~~

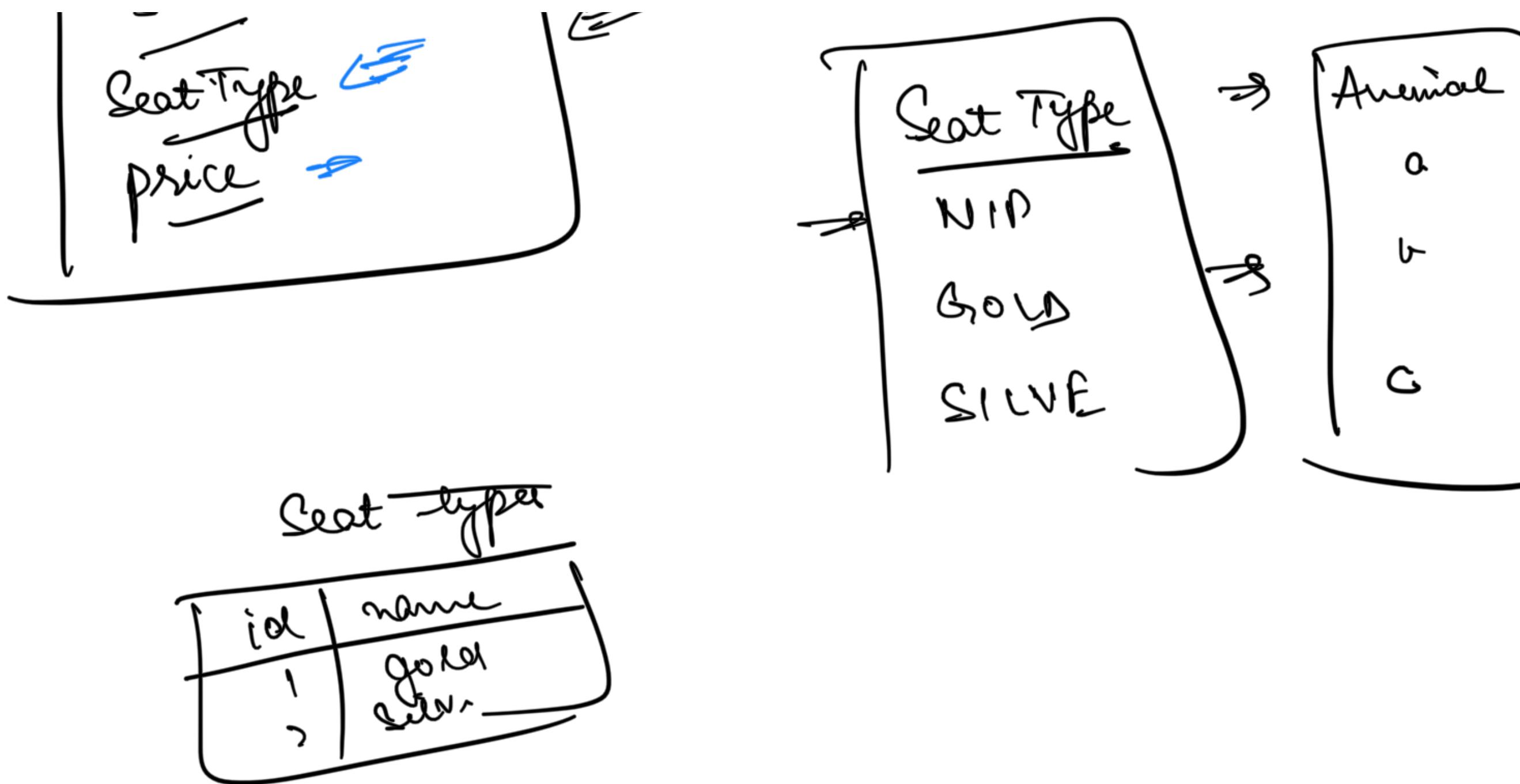


price is an attr of

rel^{on} blw

Show and Seat type

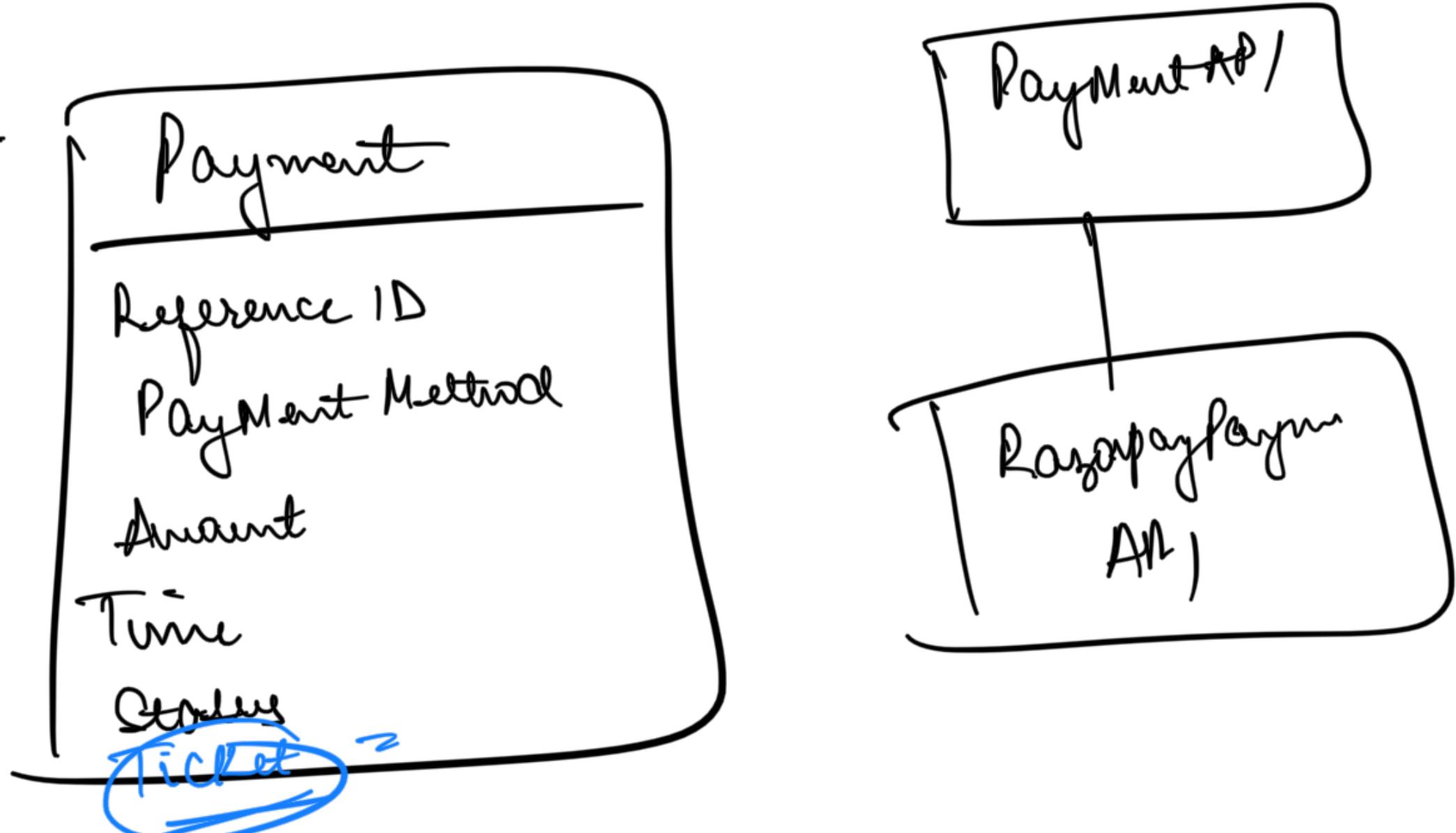




Show → Audi 1
" " → Dolly

↓

2D
—
3D
—
Do they
—



① Start with level 0 entities

② find rel^m b/w them

③ If rel^m is M:M
or rel^m has attribute

→ create a combined class

→ Remove all rel^m classes with no other

N

Assq

Try to come up with same class diagram

- ① Go to the code and read code for model
- ② Go to the code and read code for model
- ③ Code models in Spring Boot using Postgres DB

⇒ Core Problem