

⇒ BookMyShow. (Machine Coding).
↳ * Concurrency

Steps.

1) Overview : Align yourself with the interviewer.

Know Don't
know.

2) Requirement gathering

3) Class Diagram

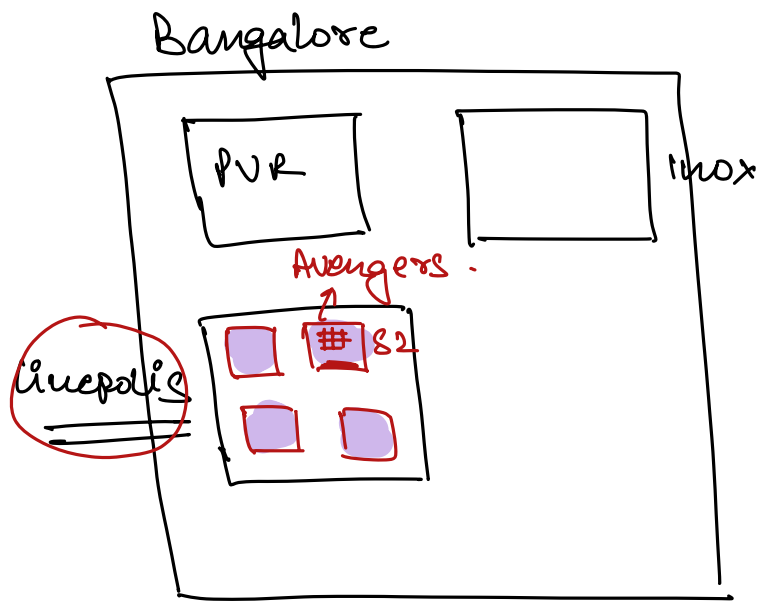
4) Schema Design.

5) Working code. (SpringBoot).

Requirement Gathering :-

1. Users should be able to book the movie tickets.
2. Users should be able to select the seats before booking.
3. Users can at max book 10 seats in one ticket.
4. BMS supports multiple cities.
5. A city will have multiple theatres.

6. A theatre will have multiple Screens/Audi,
Each screen can run 1 movie at a time.



7. Users book seats for a Show.



Movie running in a
theatre at a particular
time.

8. Users should be able to see all the movies
running in a particular region.

9. Users should be able to see all the shows
of a movie.

10. No 2 users should be allowed to book
the same seat for the same show.

11. Price : An attribute of Show + Seat Type.

Avengers.

9:00 AM Show

Monday

A1, A2

Avengers.

9:00 PM Show.

Sunday

A1, A2

Recliner / Gold / Silver... } Seat Type.

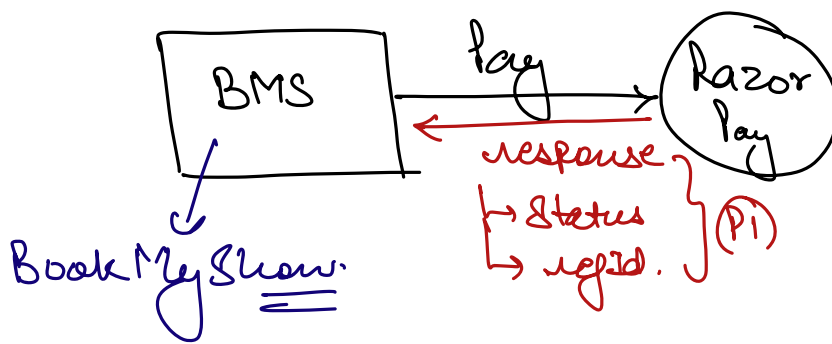
Price : Theatre + Time + Movie + Movie Type (2D/3D) + Seat Type.

↓
Show.

Seat Type

- Recliner
- Platinum
- Gold
- Silver.

12. Payment : 3rd Party



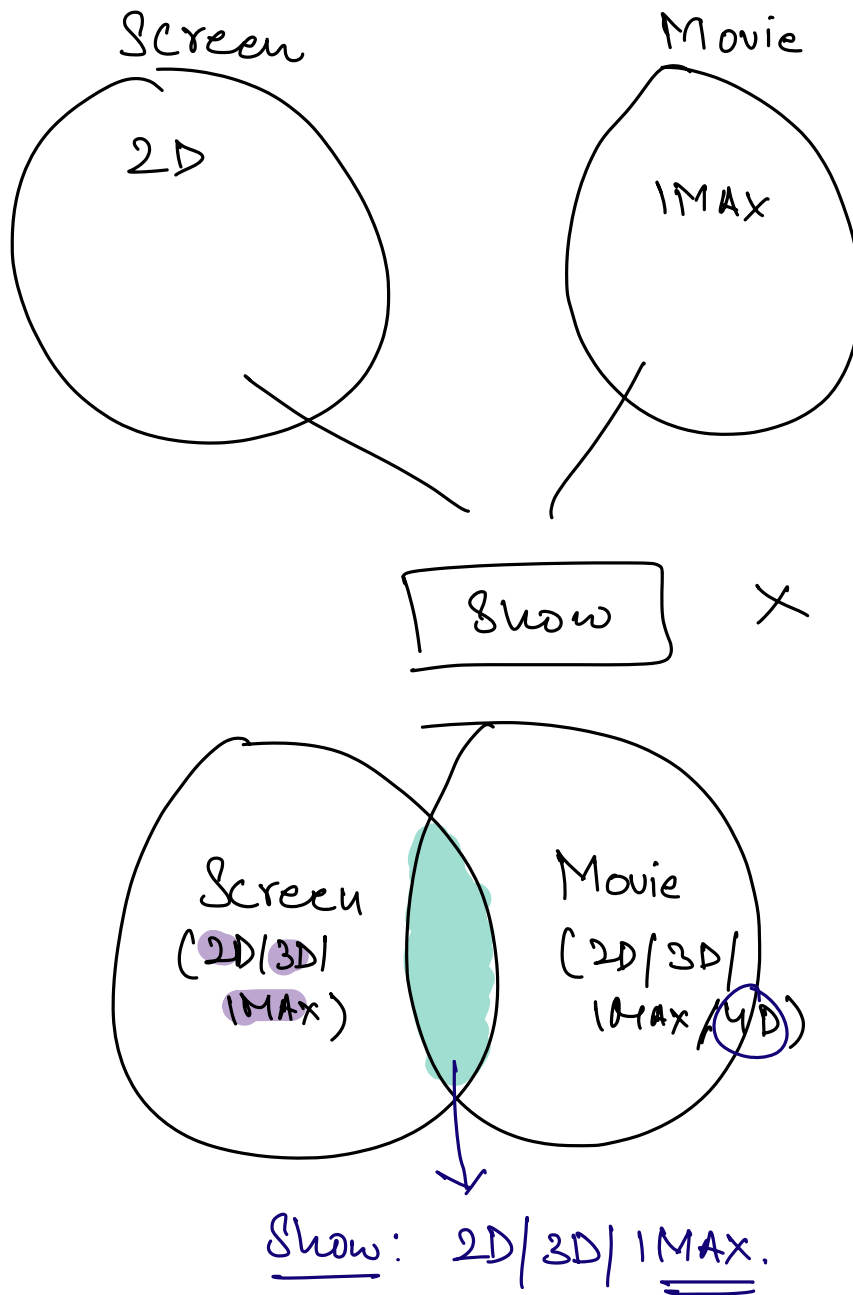
13. Users should be able to cancel the booking.

14. Refunds.

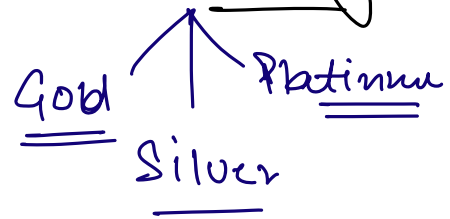
15. for every movie, we'll store its rating, casts, genre, duration, language....

16. Movie can be released in multiple formats.

↳ 2D/3D/IMAX/...



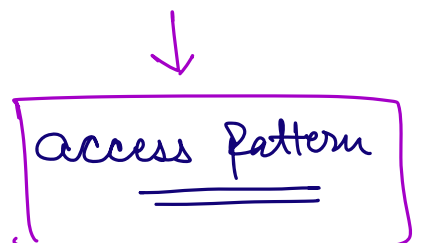
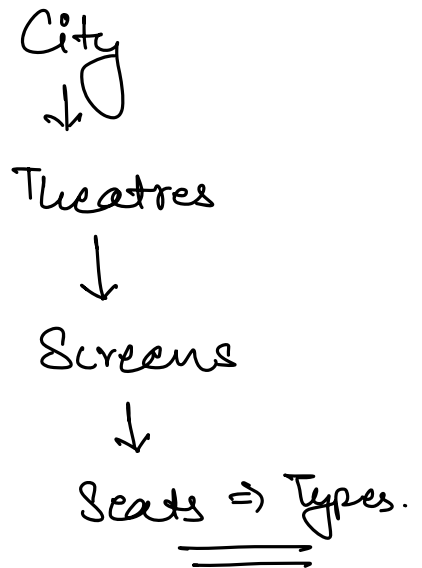
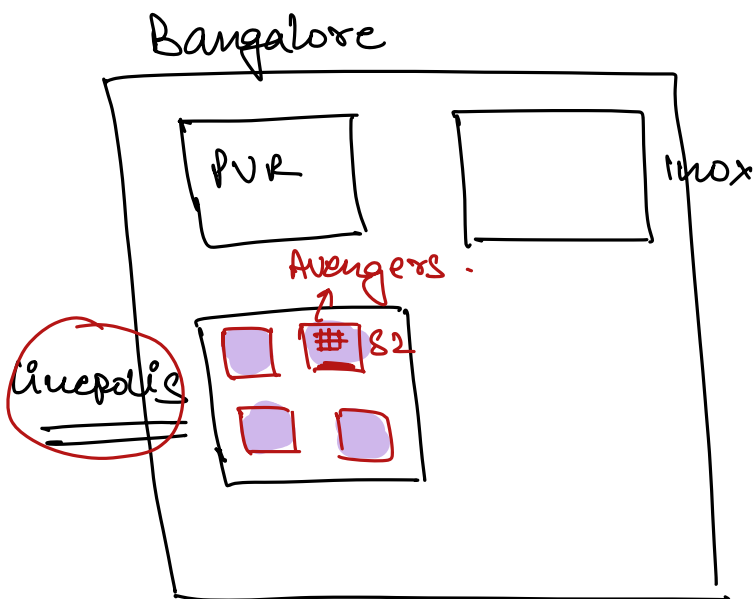
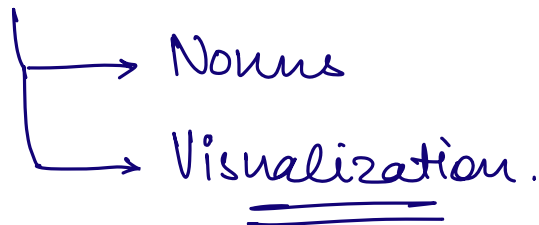
14- Each screen will have multiple seat types



18 BMS owns the data.

(Assumption)

CLASS DIAGRAM



City
<ul style="list-style-type: none"> - id - name - list<Theatre>

Theatre
<ul style="list-style-type: none"> - id - name - List<Screen> - City X

Screen
<ul style="list-style-type: none"> - id - name - list<Seat> - list<features>

feature
2D, 3D, IMAX, 4D,

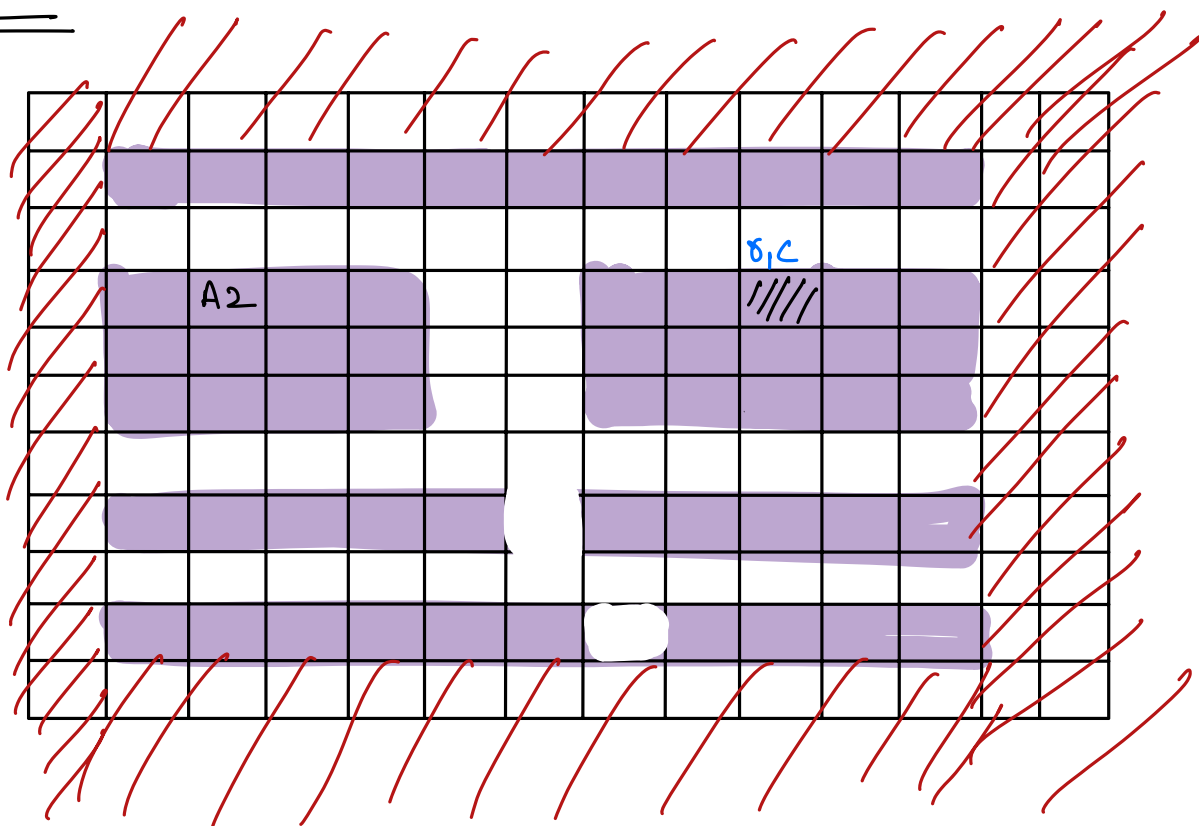
Seat
<ul style="list-style-type: none"> - id - number - SeatType - row - col - status

Booked
 Available
 → Show + Seat

SeatType
GOLD, SILVER, PLATINUM, — — —

100x100.

Matrix



Note: Every screen has a different layout.

A2
↓
Booked
4PM

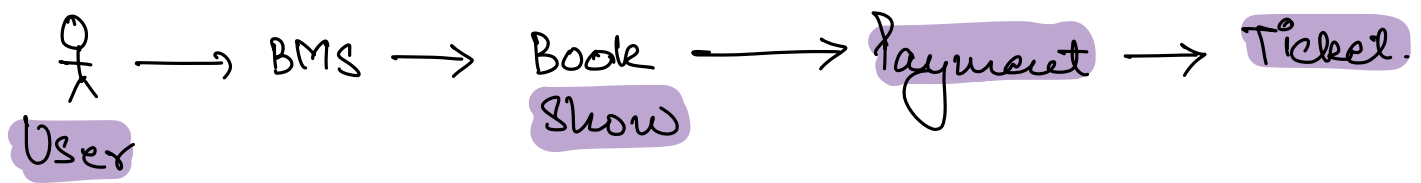
A2
↓
Available
7:00PM.

Status: Show + Seat.

↓
Mapping Entity
(Relation).

Show Seat
Show Seat Status

User Journey.



Show
<ul style="list-style-type: none">- id- Movie- Start-time- end-time- screen- list(features)

User
<ul style="list-style-type: none">- id- name- ph no- email- password

⇒ price : Show + SeatType

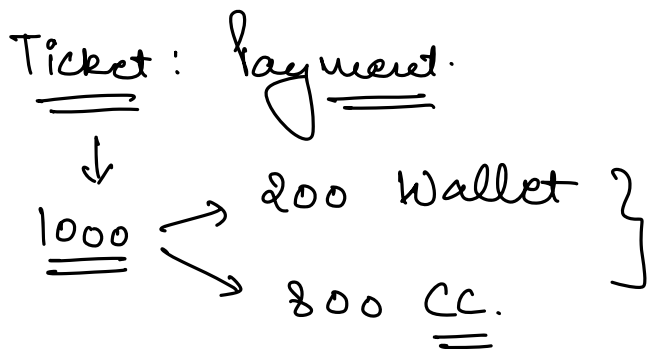
↓

Mapping.

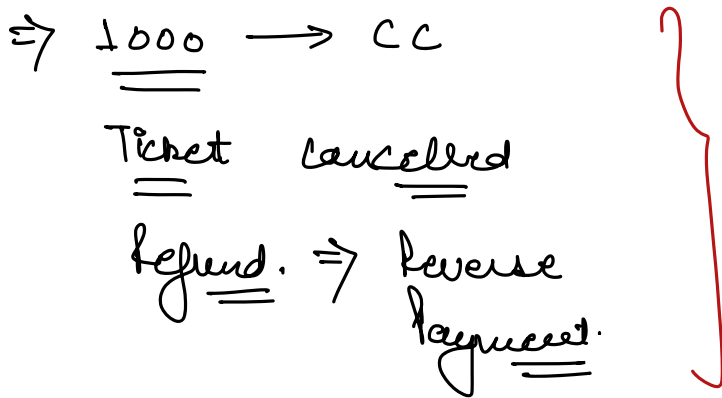
ShowSeatType
<ul style="list-style-type: none">- Show- SeatType- <u>price</u>

Booking/Ticket.
<ul style="list-style-type: none"> - id - Show - list < ShowSeat > - user - status - amount - timestamp. - list < Payment >

STATUS
IN-PROGRESS, CONFIRMED, CANCELLED, == == ==



} Partial Payment.



Payment
<ul style="list-style-type: none"> - id - amount - refId - status - MODE <ul style="list-style-type: none"> CC DC UPI - PAYMENT - GW <ul style="list-style-type: none"> Razorpay PayUM

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