



The Ticket Booth Program



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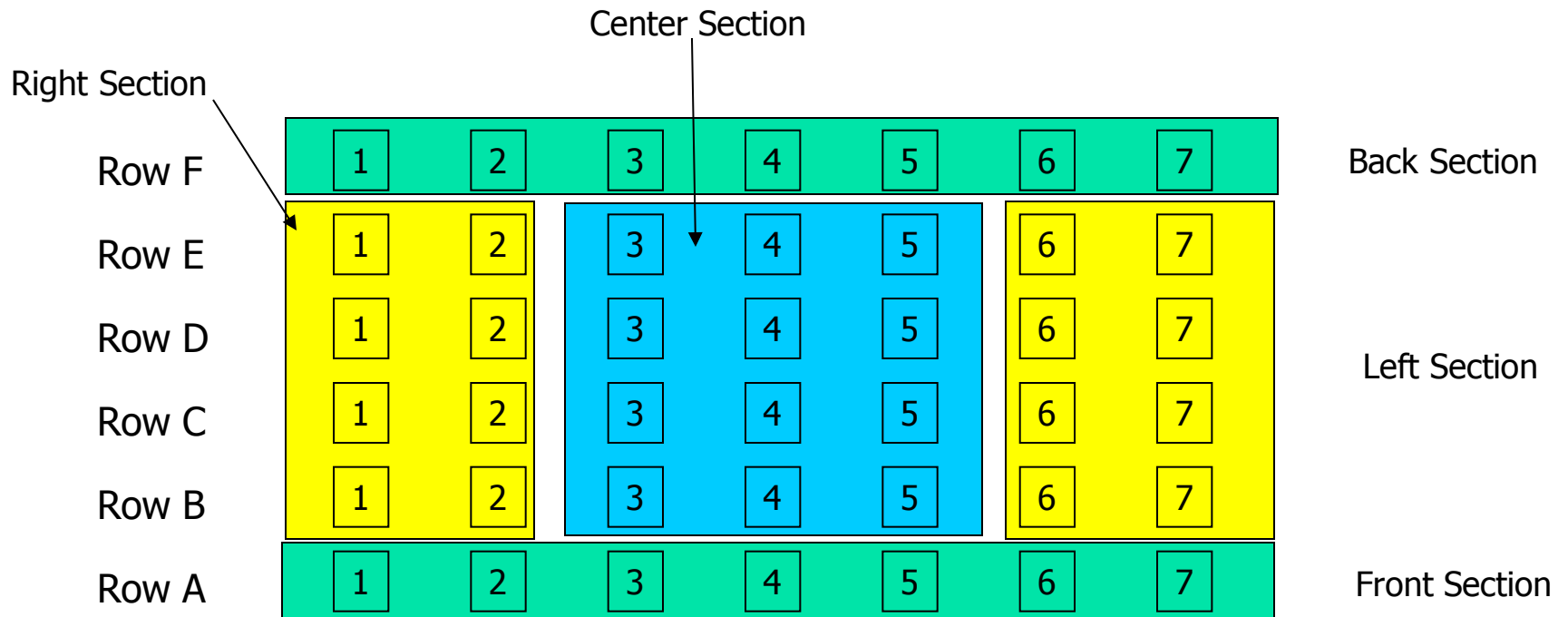
- The Ticket Booth program must handle multiple performances of multiple shows at multiple venues.
- We need to think about what information the program will need and how we will represent it in classes.
- We need a systematic way to specify Ticket Prices.
 - What will a ticket price depend on?



Venue

- Each venue will be divided into some number of seating sections.
 - Seating sections correspond to areas within the performance hall.
 - Orchestra (front)
 - Back
 - Mezanine
 - Balcony
 - Nose Bleed
 - Multiple rows may have seats in the same section.
 - Multiple sections may have seats in the same row.
- Ticket prices will vary according to section.

Example: Seating Plan





Show

- Different shows will have different prices.
 - Blockbuster
 - Ordinary
 - Dog
- Prices for a given show will vary for different performances.
 - Friday and Saturday night.
 - Weekday night.
 - Sunday matinee



Ticket Prices

- The program cannot have built-in knowledge.
 - Must get information from outside.
 - Venues, Shows, Performances.
- Ticket prices will be *determined* by an outsider.
 - Venue Manger
 - Booking Agent
- Outside the system



Ticket Prices

- Ticket prices will be *set* by a user.
 - System Administrator
- The system must provided a convenient way for the system administrator to set prices.
 - Price mechanism



Price Mechanism

- Tradeoff between convenience and flexibility.
 - Specify price for every ticket.
 - Flexible but not convenient.
 - One price for all tickets.
 - Convenient but not flexible.
- We need something between.
 - Flexible enough to provide variation in ticket prices according to desirability of seat, desirability of performance date/time, quality of show.
 - Convenient, easy to use.



Class Show

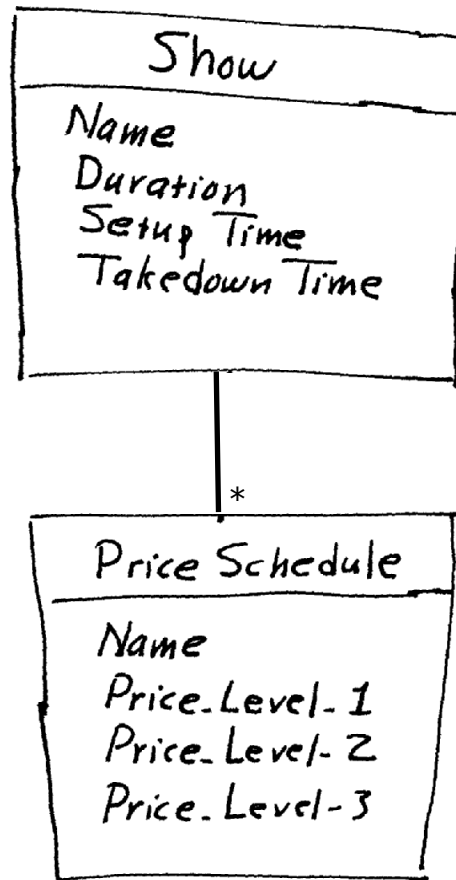
- Subject of a performance.
- Name
- Duration
- Setup time
- Takedown time
- Ticket price information
 - May depend on venue, date/time, seating section



Class Price Schedule

- Specifies prices for good, medium, and bad seats for a given performance.
 - Price_Level_1
 - Price_Level_2
 - Price_Level_3
 - Possibly more levels
- Different performances of the same show can have different price schedules, according to venue and date/time.

Class Show



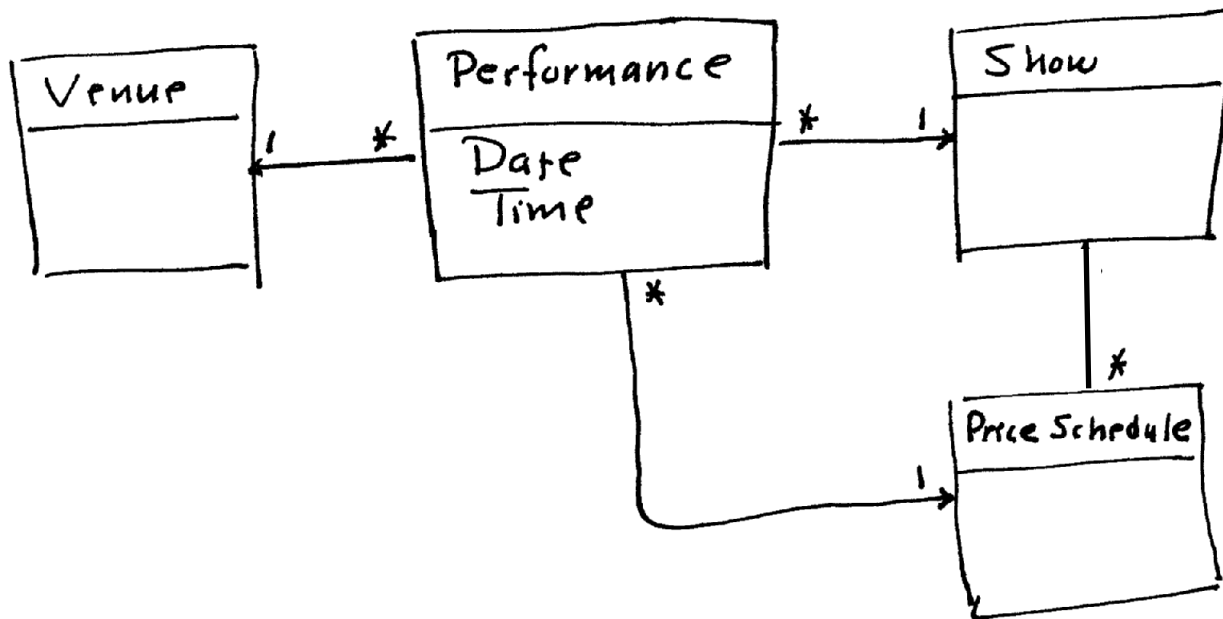


Class Performance

What we need to know about a performance

- Show
- Venue
- Date
- Time
- Price Schedule

Class Performance





Use Case: Booking a Show

A system administrator will book a show for some number of performances at a given venue.

- Specify venue.
- Specify performance dates and times.
- Specify a price schedule for each performance.
- Specify mapping of the venue's seating sections to the price levels in the show's price schedules.



Discussion

- Use case diagram for Booking a Show
- Class diagram for a Booking (?)
 - Is a Booking a *thing* in this system?