# Case Study – OOP – Requirements

## Rough Points

* Promotion Object
  + Created by venue manager
  + Can be saved/loaded
  + Can have discount on base ticket price
    - Discount can be for adult, senior, child, or student
  + Can have promotion per seat in the show, or for all seats in the show
    - Promotion must have individual price set per seat
    - Promotion must have individual price set for adult, senior, child, and student per seat
* Venue Manager Object
  + Sets base-price for all seats in a show for student, senior, adult, and child
  + Can set promotions / discounts
    - Promotions can be re-used (saved and loaded)
    - Discounts are defined per show
    - Promotion can be applied to individual seats
    - Promotion pricing structure must accommodate senior, adult, student, and child
  + Can cancel, reschedule, and add events
  + Can make changes to maximum seats per customer
* Agent Object
  + Can act on behalf of customer
  + Controls a subset seat assignments for a date-range, not per show
  + Same seat selection system as customer, except they can only select seats in the subset they control
  + See sold tickets per show or overall shows within date range
* Customer object
  + Username, password, email address, name, age
  + Customer type (Senior, Adult, Child, Student)
  + Seats owned for each show
* Show object
  + Standard Price for adult, senior, student, child (venue manager set)
  + Discount for entire show (venue manager set)
  + Max seats per customer
  + Time of show
  + Seat Object
    - Agent controlled/owned
    - Price
      * Adjustable by promotion (venue manager set)
      * Adjustable by amount of seat tickets being purchased (customer set)
      * Adjustable by type of customer purchasing (customer set)
    - Ticket object
      * Seat on hold while ticket in purchase process
        + After ticket put on hold, 5 min timer starts, after 5 mins is up the system prompts user with alarm on whether or not they want to continue with transaction, alarm sounds every minutes for 3 minutes after this, after this time all held tickets are released, applies to agent or customer
      * Seat removed when ticket purchased
      * Seat available when not in purchase process or purchased
* Customers view events/shows in list
  + Event / show object
* Shows/Events have seating charts, customers can select seats
  + Seat object
  + Price shown per seat
* Seats are assigned to agents for sale by date range, not show
* Prices vary per show, ticket type (adult, senior, student, etc), and seat
  + Promotions can be per seat
  + Prices are dynamic per seat and can change after event put-up
* Venue manager has admin access
  + Add/Edit/Remove Shows
  + Set max seats per customer for each show