

The TicketBooth System

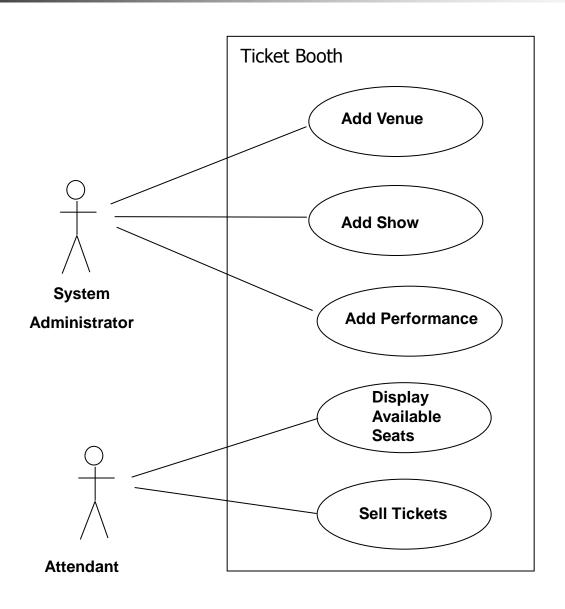
Use Case Diagram and Scenarios



- Notes from class discussion are on the class web site:
- http://www.csee.usf.edu/~turnerr/Object Oriented Design/
 107 Ticket Booth Discussion Notes.pdf



Ticket Booth Use Case Diagram



Scenario: A New Venue

Scenario name	A New Venue
Participating actor instances	Hal: Executive Director Andy: System Administrator

Flow of events

- 1. Hal has signed a contract for the TicketBooth system to sell tickets for a new venue, the Music Hall. The terms of the contract include specification of all seats in the theater and definition of seating sections that will determine ticket prices.
- 2. Hal finds Andy at his desk and gives him the new venue information.
- 3. Andy logs in on the TicketBooth system as System Administrator.
- 4. Andy selects the "Add Venue" function from the system administrator menu.
- 5. Prompted by the system, Andy enters the name and address of the new venue.
- 6. The system acknowledges successful entry of the information.
- 7. Prompted by the system, Andy enters the name of each seat row in the theater and the seat numbers of seats in each row.
- 8. The system acknowledges successful entry of the information.
- 9. Prompted by the system, Andy enters the name of each seating section and identifies the seats in each section.
- 10. The system acknowledges successful entry of the information and returns to the main menu for system administrator.
- 11. Andy logs off and goes home.

Scenario: A New Booking

Scenario name	A New Booking
Participating actor instances	Bob: Booking Agent Andy: System Administrator

Flow of events

- 1. Bob has signed a contract for a musical theater troupe to give four performances of their current musical in The Music Hall. There will be evening performances at 7:30 PM on Thursday, Dec 9, at 8:00 PM on Friday Dec. 10 and Saturday, Dec. 11, and a matinee performance at 2:00 PM on Sunday Dec. 12.
- The booking contract specifies ticket prices for each of the four seating sections of The Music Hall. Different prices are specified for the Thursday evening performance, the Friday and Saturday evening performances, and the Sunday matinee.
- The booking contract also specifies the duration of the performance and the minimum amount of time required for setup prior to an performance and takedown following a performance.
- 2. Bob finds Andy at his desk and gives him the booking information.
- 3. Andy logs in on the TicketBooth system as System Administrator.
- 4. Andy selects the "Add Show" function from the system administrator menu.
- 5. Prompted by the system, Andy enters the name of the show, the three ticket price schedules, and time requirements for the show.
- 6. The system acknowledges successful entry of the show.

A New Booking (Continued)

- 7. Now Andy selects the "Add Performance" function from the system administrator menu.
- 8. Prompted by the system, Andy enters the date and time of the first performance and the applicable ticket price schedule.
- 9. The system verifies that the venue is available at the specified time, and acknowledges successful entry of the performance.
- 10. Andy repeats this action for each of the additional three performances.
- 11. The system returns to the main menu for system administrator
- 12. Andy logs off.

Scenario: Customer Buys Tickets

Scenario name	<u>Customer buys tickets</u>
Participating actor	Betty: Customer
instances	Ann: Ticket Seller

Flow of events

- 1. Ann has arrived at her work position in the downtown ticket booth and logged in on the TicketBooth system as a ticket seller.
- 2. Betty wants to buy tickets for a performance at the Music Hall. She has invited three guests to join her. So she needs a total of four tickets. She would like to get seats near the front, but not too close, on the left hand side. She is willing to pay whatever the price might be.
- 3. Betty goes to the ticket booth and explains to Ann what she wants: the show, date and time of the performance, and preferred seats.
- 4. Ann selects the venue and performance and displays the seats available. She finds that there are four adjacent seats available near the left end of row H, at a cost of \$75.00 each. Ann describes the seats to Betty and tells her the price.
- 4. Betty says that she will take those tickets. She will pay by credit card.
- 5. Ann charges the cost of the tickets to Betty's credit card. (This is handled outside the TicketBooth system.)
- 6. Ann enters the seat IDs into the TicketBooth system and orders the tickets.
- 7. The TicketBooth system prints the tickets, including name of the performance, date and time, seat number, section, and price.
- 8. Ann gives the tickets to Betty, along with her credit card invoice.
- 9. Betty leaves the box office.