Requirement Specification for Box Office V8

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Sender	Team 26 (Operations)

To: Box Office Team

Dear Team 25, we hope your processes are going well.

As we continue developing Lancaster's Music Hall's new system, we want to ensure that the Operations team can efficiently collaborate with the Box Office team through a Java interface, to allow us to pull data to help us reach our relevant tasks and vice versa. To achieve this, below are the primary features we need access to, and we kindly ask for your collaboration and for you to produce the Java interface(s) for the following, to ensure our requirements align with your processes and the customer’s requirements.

1. **Seat Configuration Review:**

The operations team will need access to the seating arrangements that the Box Office team configures for each event, particularly for restricted view seats and wheelchair spaces. This will enable us to coordinate seating configurations with room setups and ensure that no restricted seats are mistakenly sold or blocked when they shouldn’t be.

Access Level: Read-Only

Required data:

- eventID (String/Int): Unique ID for each event.
- seatMap (2D array or a List of seat objects): Seat map configuration for the event.
- seatID (String/Int): Unique ID for each seat.
- seatStatus (String): Status of the seat (available, sold, blocked, etc.).
- restrictedView (boolean): Indicates whether a seat has a restricted view.
- wheelchairAccessible (boolean): Indicates whether a seat is wheelchair accessible.
- totalRestrictedSeats (int): Total number of restricted-view seats.
- totalAccessibleSeats (int): Total number of wheelchair-accessible seats.

2. **Access to Ticket Sales Data (Revenue):**

We require real-time access to ticket sales information, including seat bookings for each show and film. The interface should allow us to view how many tickets have been sold and how many seats are still available. This will help us ensure that the seating configurations meet the demands of each performance and that all customer's needs are met, including accessibility requirements. Will also need access group booking ticket sales.

Access Level: Read-only

Required Data:

- totalTicketsSold (int): The total number of tickets sold.
- totalSeatsAvailable (int): The total number of unsold seats.
- soldSeatsList (array of Int seat IDs): The list/array of booked seat IDs.
- availableSeatsList (array of Int seat IDs): The list/array of available seat IDs.
- accessibleSeatsSold (int): Number of tickets sold for accessible seating.
- totalAccessibleSeats (int): Total number of accessible seats.
- totalRevenue (int/double): Revenue earnt from the event.

- Group Booking (List<Seating>): A List or an Array that provides the group of people that have collectively booked so that Operations could block of seating

3. **Guest Check-in Data:**

   Access to guest attendance data, such as ticket scans and check-ins, so that we can monitor the number of guests on-site and help with operational decisions on event days. We would be then able to automatically produce daily sheets to inform day-to-day or even, event-to-event operations.

   Access-Level: Read-Only

   Required data:

   - totalGuestsCheckedIn (int): The total number of guests who have checked in.
   - checkInList (array or List of check-in objects): A list of guests who have checked in.
   - ticketID (String/Int): The ID of the ticket scanned.
   - checkInTime (int/Date e.g. 1400 → 2pm): The timestamp of when the guest checked in.
   - eventCapacity (int): The maximum number of guests allowed at the event.
   - remainingCapacity (int): The number of guests who can still check in.
   - eventName (String): The name of the event and/or company of said event
   - endTime (int/Date e.g 16:00 → 4pm): when the event ends
   - room (String): The name of the hall that is in use

5. **Refund Management:**

The interface should provide us with the ability to view refund activity processed by the Box Office team. While we understand that only the Box Office manager and Deputy can issue refunds, having visibility into refunds and ticket cancellations will allow us to track overall ticket revenue more effectively and ensure our financial records are accurate.

Access-Level: Read-Only

Required data:

- refundCount (int): The total number of refunded tickets.
- refundAmountTotal (double/float (keep it consistent either way): The total monetary value of refunded tickets.
- ticketID (String/Int): The ID of the refunded ticket.
- refundDate (String/Date e.g. ‘2024-04-15’): The date the refund was processed.
- refundAmount (double/float (keep it consistent either way): The amount refunded for the ticket.
- refundReason (String): Reason for refund (if applicable).

Please let us know if there are any additional details or considerations we should include in the interface to better facilitate collaboration between our teams.

Best regards,

Operations Team (26) - Strivers

Customer: Lancaster’s Music Hall