Lancaster's Music Hall System - Operations Interface Specifications

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1. Introduction

This document details the interface specifications for the Operations team to provide data access to the Marketing and Box Office teams for the Lancaster's Music Hall System. This system aims to streamline scheduling, ticketing, group bookings, and venue coordination. This document focuses specifically on the data Operations needs to provide.

2. Data Provided by Operations

2.1 Venue Calendar Data

Purpose: To allow Marketing and Box Office to view event schedules, identify available slots, and manage bookings.

Methods:
- getVenueCalendar(venueID, date): Retrieves the calendar for a specific venue and date.
- getEventDetails(eventID): Provides detailed information about a specific event.
- addEvent(event): Adds a new event to the calendar (authorization required).
- updateEvent(event): Modifies an existing event (authorization required).
- deleteEvent(eventID): Deletes an event from the calendar (authorization required).

Data Structure (Example):
- host_id (int): ID of the hosting organization.
- event_id (int): Unique ID of the event.
- event_name (string): Name of the event.
- venue_id (int): ID of the venue.
- venue_name (string): Name of the venue.
- date (date): Date of the event.
- start_time (dateTime): Start time of the event.
- end_time (dateTime): End time of the event.
- status (string): Status of the event (e.g., 'scheduled', 'confirmed', 'cancelled').

2.2 Seating Data

Purpose: To allow the Box Office to view seat availability, manage reservations, and handle accessibility requirements.

Methods:

- getSeatingChart(venueID, date, time): Retrieves the seating chart for a specific venue, date, and time.
- getSeatStatus(venueID, seatID): Gets the current status of a specific seat.
- reserveSeat(venueID, seatID): Reserves a seat (authorization required).
- releaseSeat(venueID, seatID): Releases a reserved seat (authorization required).

Data Structure (Example):

- venue_id (int): ID of the venue.
- seat_id (int): Unique ID of the seat.
- row_number (int): Row number of the seat.
- seat_number (int): Seat number within the row.
- status (string): Status of the seat (e.g., 'available', 'reserved', 'blocked').
- restricted_view (bool): Indicates if the seat has a restricted view.
- date (date): Date for which the seat status is valid.
- start_time (dateTime): Start time for which the seat status is valid.
- end_time (dateTime): End time for which the seat status is valid.

2.3 Tours & Venue Usage Data

Purpose: To facilitate scheduling and management of educational tours and other venue-related activities.

Methods:

- getTourAvailability(date): Retrieves available time slots for tours on a specific date.
- bookTour(tourDetails): Books a tour (authorization required).
- updateTour(tourDetails): Modifies an existing tour (authorization required).

3. Additional Considerations

- Data Security: Operations will implement security measures to protect sensitive data.
- Real-time Updates: Data should be updated in real-time.
- Group Bookings: Group bookings (12+ people) should be flagged for Operations to ensure logistical read
- Special Ticket Types: Management of complimentary tickets and artist guest lists.