

Java Interfaces for Box Office Team

This document outlines the data requirements for the Box Office team to support Lancaster's Music Hall's integrated system. This system aims to streamline scheduling, ticketing, and venue coordination across different teams. This document focuses specifically on the data Box Office needs to provide.

1. Ticket Sales & Seat Management Interface

Purpose:

- Synchronize ticket sales across platforms.
- Maintain accurate seating records.
- Manage reservations and holds.
- Handle special ticket types (VIP, etc.).

Methods:

- `getAvailableSeats(eventID)`: Retrieves a list of available seats for a given event.
- `getSeatStatus(seatID)`: Gets the current status of a specific seat.
- `reserveSeat(seatID, customerID)`: Reserves a seat for a customer.
- `purchaseTicket(seatID, customerID, price)`: Processes a ticket purchase.
- `holdTicket(seatID, customerID, duration)`: Places a hold on a ticket.
- `releaseTicket(seatID)`: Releases a held or reserved ticket.
- `getBookingDetails(bookingID)`: Retrieves details of a specific booking.

Data Structure:

- `booking_id` (int): Unique ID of the booking.
- `customer_id` (int): ID of the customer.
- `event_id` (int): ID of the event.
- `price` (int): Price of the ticket.
- `quantity` (int): Number of tickets in the booking.
- `booking_date` (string): Date of the booking.
- `discount_type` (string): Type of discount applied (if any).

2. Group Bookings & Special Reservations Interface

Purpose:

- Efficiently manage large group reservations.
- Handle bulk pricing and seating adjustments.
- Track and approve special ticket types.

Methods:

- createGroupBooking(groupDetails): Creates a new group booking.
- getGroupBookingDetails(bookingID): Retrieves details of a group booking.
- applyBulkPricing(bookingID, discount): Applies bulk pricing to a group booking.
- approveSpecialTicket(ticketID): Approves a special ticket request.

Additional Notes:

- Group bookings (12+ people) should be flagged for Operations.
- Special ticket types (comp tickets, artist guest lists) need tracking and approval mechanisms.

3. Customer Data Access Interface

Purpose:

- Support personalized communication for 'Friends of Lancaster' members.
- Track repeat customers.
- Enable customer support functions.

Methods:

- getCustomerDetails(customerID): Retrieves customer information.
- updateCustomerDetails(customerID, details): Updates customer information.
- getCustomerBookings(customerID): Retrieves booking history for a customer.

4. Integration with Marketing Interface

Purpose:

- Track sales trends and support targeted promotions.
- Enable Marketing to schedule discounts and offers.
- Allow Marketing to place seat holds for 'Friends of Lancaster' members.

Methods:

- getSalesData(dateRange): Retrieves sales data for a specified period.
- createDiscount(discountDetails): Creates a new discount offer.
- placeSeatHold(seatID, duration, reason): Places a hold on a seat for marketing purposes.

Additional Notes:

- Marketing has read-only access to sales data.
- Box Office has full access to this interface.