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**Schema: movie\_ticket\_sales**

**Tables:**

* **Users:** Stores user account information, including a unique ID, username, password, and role (either customer or admin).
* **Customers:** Contains customer details linked to users, name, email, and phone number. It relates to the Users table through user\_id.
* **Movies:** Holds movie information, such as title, director, runtime, and rating.
* **ScreenTypes:** Defines types of screens available in the theater, each with a unique name.
* **Screens:** Details on individual screens, including their type and capacity, linked to ScreenTypes via screen\_type\_id.
* **Showtimes:** Lists showtimes for movies, including the movie ID, screen ID, and the datetime of the show.
* **Seats:** Keeps track of seats for each screen, their number, and status (e.g., available, booked).
* **Tickets:** Represents tickets sold, linking showtimes, seats, and customers, with a timestamp for the booking time.
* **Sales:** Records sales transactions, including the ticket sold and the sale amount, along with a timestamp.

**Views:**

* **availableseats:** Shows available seats for each showtime and movie.
* **currentmovieschedule:** Displays the current movie schedule, including titles, showtimes, and screen names.
* **salessummarybymovie:** Provides a summary of sales by movie, including the number of tickets sold and total sales amount.

**Procedures:**

* **BookTicket:** Books a ticket for a customer, marking the seat as booked if available.
* **CancelTicket:** Cancels a ticket, freeing up the seat and deleting the ticket record.
* **CheckSeatAvailability:** Checks seat availability for a specific showtime.
* **GenerateSeatsForScreen:** Generates seats for a given screen based on its capacity.

**Functions:**

* **IsShowtimeSoldOut:** Determines if a showtime is sold out based on ticket sales and screen capacity.
* **TicketsSoldForShowtime:** Counts the number of tickets sold for a specific showtime.
* **TotalSalesForMovie:** Calculates the total sales for a particular movie.

**Triggers:**

* **PreventSoldOutSales:** Prevents ticket sales for sold-out showtimes.
* **RestrictLateBookings:** Restricts ticket bookings beyond a specified time after the showtime begins.
* **UpdateSalesAfterCancellation:** Deletes sales records corresponding to a canceled ticket.
* **UpdateSalesAfterBooking:** Inserts a sales record after a ticket is booked.