***Cinema Seat Reservation System***

**Overview**

This F# code creates a Windows Forms application for a ticket booking system. It handles the display of available seats for different showtimes and allows users to book seats, saving the ticket details to a JSON file. The application also updates seat availability dynamically.

**Imports**

* System and System.Windows.Forms: For creating the Windows Forms GUI.
* System.IO: For file operations like reading and writing JSON data.
* System.Collections.Generic: For using collections like List and Dictionary.
* System.Text.Json: For serializing and deserializing ticket data.
* System.Text.RegularExpressions: For parsing seat strings.

**Functions**

**Loading and Saving Tickets**

* **loadTickets**: Reads the JSON file and deserializes it into a list of TicketModel.
* **saveTickets**: Serializes a list of TicketModel into JSON format and writes it to the file.

**Seat Management**

* **create2DSeats**: Creates a 2D list (rows × columns) of seat models, initializing each seat as available (flag = false).
* **getAvailableSeats**: Flattens the 2D list of seats and filters out the ones that are already booked (flag = true).

**Initialization**

* Populate the showtimeSeats dictionary with predefined showtimes and corresponding 2D seat layouts.
* Load tickets from the JSON file and mark already booked seats.

**Event Handling**

* **Showtime Selection**: Updates the seat combo box with available seats for the selected showtime.
* **Button Click**: Books the selected seat, updates the showtimeSeats dictionary, saves the ticket to the JSON file, and refreshes seat availability.

**Final Application Run**

* The application starts with Application.Run(form).

**Booking Logic**

1. When the "BOOK" button is clicked:
   * The selected showtime is retrieved from comboBoxForShowTime.
   * The selected seat is parsed using extractSeatDetails.
   * The seat's status (flag) is updated in showtimeSeats.
   * A new ticket is added to the JSON file with the customer's name, seat, and showtime.
2. After booking:
   * Available seats for the selected showtime are refreshed.
   * The updated showtimeSeats dictionary is logged to the console.

**seat Updates Based on Loaded Tickets**

* For each ticket in the JSON file:
  + The seat and showtime are extracted.
  + The corresponding seat in showtimeSeats is marked as booked.

**User Interface Flow**

1. **Startup**:
   * Loads of existing tickets from tickets.json.
   * Initializes showtimeSeats with predefined layouts.
   * Updates seats based on loaded tickets.
2. **User Interaction**:
   * Select a showtime from comboBoxForShowTime.
   * View available seats for the selected showtime in comboBox.
   * Enter customer details in textBox.
   * Click the "BOOK" button to book a seat.
3. **Post-Booking**:
   * Updates the GUI and JSON file with the new booking.
   * Refreshes the seat list to reflect updated availability.