Film Screening Reservation System

Introduction

The Film Screening Reservation System is a simple web-based application that allows users to view available films and showtimes, reserve seats, cancel reservations, and calculate total revenue. This project demonstrates basic JavaScript concepts such as classes, higher-order functions, and DOM manipulation, making it an excellent introduction to building interactive web applications.

Project Type

Frontend

Deployed App

Since this is a simple frontend project, you can run it locally by opening the `index.html` file in your web browser.

Directory Structure

graphql
Copy code

```
FilmScreeningReservation/
├── index.html         # Main HTML file to run in the browser
├── FilmScreening.js   # JavaScript class for handling the film
screening logic
├── helpers.js         # Helper functions (e.g., welcome message)
└── style.css          # (Optional) CSS file for styling (if added)
```

Video Walkthrough of the Project

https://drive.google.com/file/d/1Yy8movmYPQjEl5HlBAv8fTff5rzcWwSQ/view?usp=sharing

Video Walkthrough of the Codebase

https://drive.google.com/file/d/1_1k8d3KMdnIlAHNKOg0t dqJveO0G4Jdf/view?usp=sharing

[Attach a video walkthrough here, explaining the structure of the codebase and key parts of the implementation.]

Features

- **List Available Films and Showtimes**: View a list of all available films and their corresponding showtimes.
- **Reserve a Seat**: Reserve a seat for a selected film and showtime.
- **Cancel a Reservation**: Cancel an existing reservation and update the seat availability.
- **Calculate Total Revenue**: Calculate and display the total revenue generated from all reservations.
- **Check Seat Availability**: Check the number of available seats for a specific film and showtime.

Design Decisions or Assumptions

- The application is designed to be simple and focuses on core functionalities without persistent data storage (i.e., all data is stored in-memory and lost when the page is refreshed).
- Each film has a fixed number of available seats (e.g., 50), and each ticket is assumed to have a fixed price (e.g., $10).
- The project uses vanilla JavaScript without any frameworks to keep it lightweight and easy to understand.

Installation & Getting Started

No installation is required for this frontend project. Simply download the project files and open `index.html` in your web browser.

bash
Copy code
```
# Clone the repository (if using version control)
git clone https://github.com/yourusername/FilmScreeningReservation.git

# Navigate to the project directory
```

```
cd FilmScreeningReservation

# Open the index.html file in your browser
open index.html  # On macOS
start index.html # On Windows
```

Usage

1. **View Available Films**: Open the page and see the list of available films and their showtimes.
2. **Reserve a Seat**: Enter the film title, showtime, and your name in the reservation form and click "Reserve Seat".
3. **Cancel a Reservation**: (Optional) Add functionality to cancel a reservation if desired.
4. **Check Total Revenue**: The total revenue will automatically update each time a seat is reserved.

Credentials

No authentication is required for this application.

APIs Used

This project does not rely on external APIs. All data is managed locally within the JavaScript code.

API Endpoints

N/A (This is a frontend-only project with no backend or external API interaction.)

Technology Stack

- **HTML**: For structuring the web page.
- **CSS**: For basic styling (optional, not included in the basic project).
- **JavaScript**: For implementing the logic of the Film Screening Reservation System.