Assignment - 9

JavaScript

➢ GitHub Link:

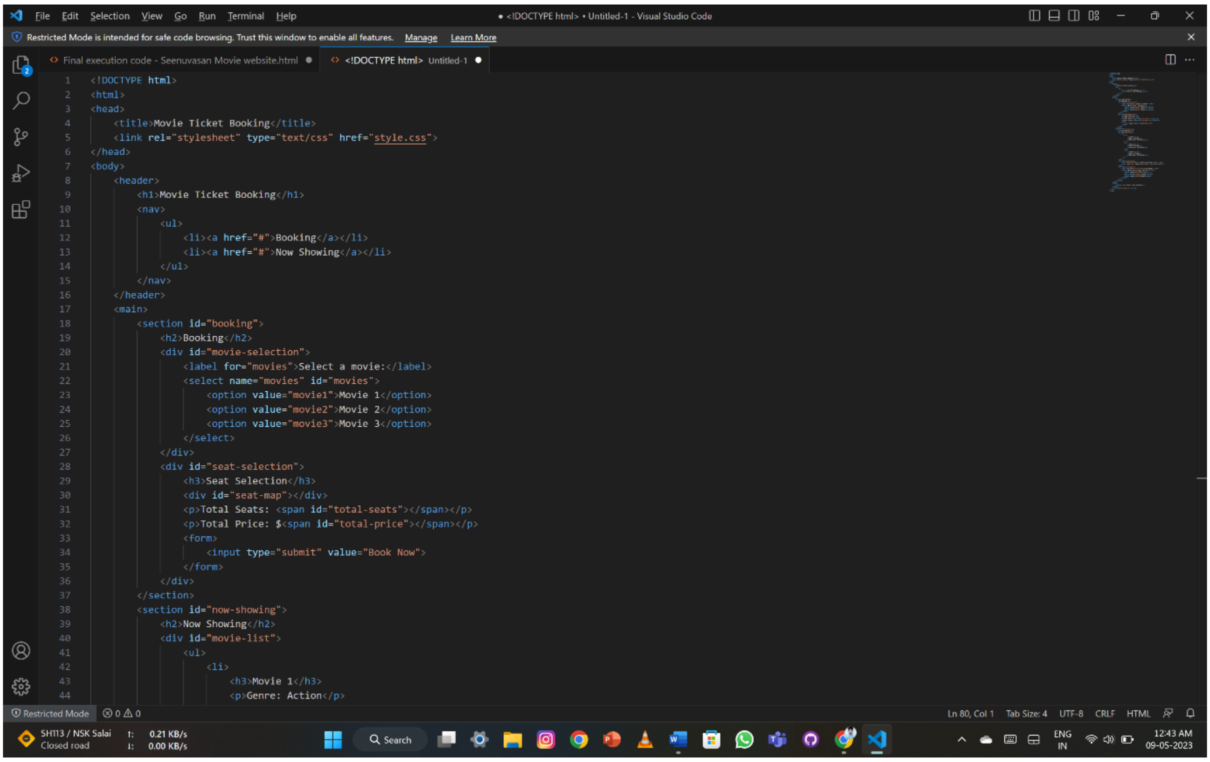
https://github.com/Seenuvasan91/Worldline-Training-Assignment/tree/0d9ffa5a58125a0eeb780fc0f91f4980efb98719/Assignment%209%20Javascript

➢ Steps to followed be to create Movie ticket booking:

1. Create a new HTML document and add the necessary CSS styling:

- To create the website, I used to create an HTML document and add the necessary CSS styling to create a home page with two options:

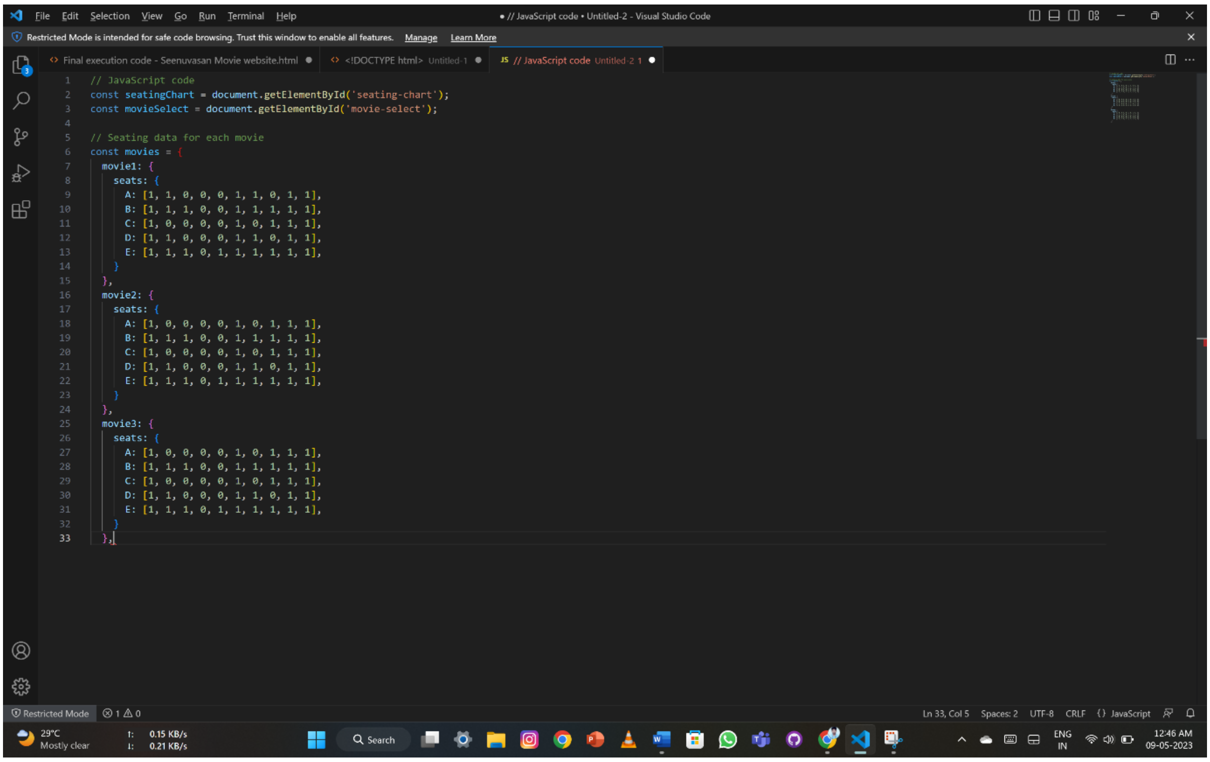
- The booking page and the now-showing page. I can use CSS to style the page and make it visually appealing.


File Edit Selection View Go Run Terminal Help
● <!DOCTYPE html> • Untitled-1 - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
Final execution code - Seenuvasan Movie website.html
<!DOCTYPE html> Untitled-1
Restricted Mode
Ln 80, Col 1 Tab Size: 4 UTF-8 CRLF HTML
SH113 / NSK Salai
Closed road
0.21 KB/s
0.00 KB/s
Search
ENG IN
12:43 AM
09-05-2023

```html
<!DOCTYPE html>
<html>
<head>
    <title>Movie Ticket Booking</title>
    <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
    <header>
        <h1>Movie Ticket Booking</h1>
        <nav>
            <ul>
                <li><a href="#">Booking</a></li>
                <li><a href="#">Now Showing</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <section id="booking">
            <h2>Booking</h2>
            <div id="movie-selection">
                <label for="movies">Select a movie:</label>
                <select name="movies" id="movies">
                    <option value="movie1">Movie 1</option>
                    <option value="movie2">Movie 2</option>
                    <option value="movie3">Movie 3</option>
                </select>
            </div>
            <div id="seat-selection">
                <h3>Seat Selection</h3>
                <div id="seat-map"></div>
                <p>Total Seats: <span id="total-seats"></span></p>
                <p>Total Price: $<span id="total-price"></span></p>
                <form>
                    <input type="submit" value="Book Now">
                </form>
            </div>
        </section>
        <section id="now-showing">
            <h2>Now Showing</h2>
            <div id="movie-list">
                <ul>
                    <li>
                        <h3>Movie 1</h3>
                        <p>Genre: Action</p>
```

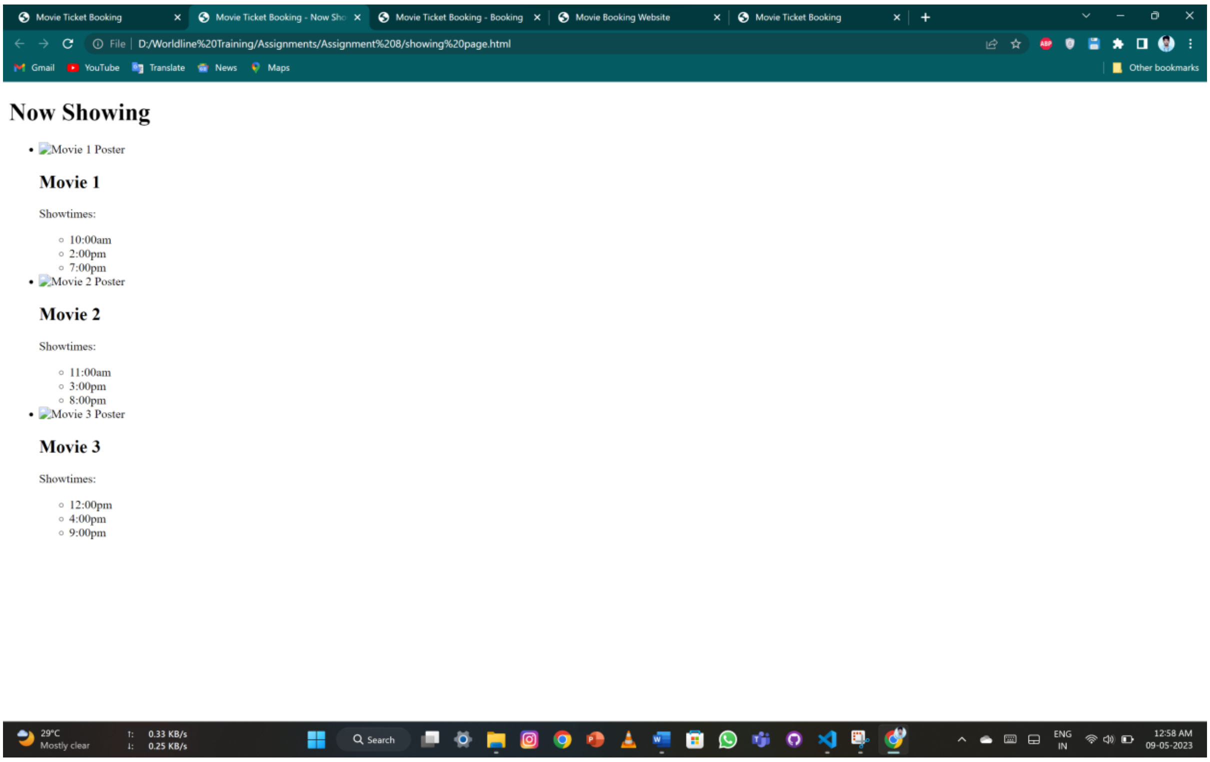
2. Add a drop-down list that allows users to select the movie they want to watch:

- Using JavaScript, I can dynamically generate the available and booked seats for each movie. Display the available seats in green and the booked seats in blue.
- I can use the DOM manipulation to create a drop-down list that allows users to select the movie they want to watch.



```
// JavaScript code
const seatingChart = document.getElementById('seating-chart');
const movieSelect = document.getElementById('movie-select');

// Seating data for each movie
const movies = {
  movie1: {
    seats: {
      A: [1, 1, 0, 0, 0, 1, 1, 0, 1, 1],
      B: [1, 1, 1, 0, 0, 1, 1, 1, 1, 1],
      C: [1, 0, 0, 0, 0, 1, 0, 1, 1, 1],
      D: [1, 1, 0, 0, 0, 1, 1, 0, 1, 1],
      E: [1, 1, 1, 0, 1, 1, 1, 1, 1, 1],
    }
  },
  movie2: {
    seats: {
      A: [1, 0, 0, 0, 0, 1, 0, 1, 1, 1],
      B: [1, 1, 1, 0, 0, 1, 1, 1, 1, 1],
      C: [1, 0, 0, 0, 0, 1, 0, 1, 1, 1],
      D: [1, 1, 0, 0, 0, 1, 1, 0, 1, 1],
      E: [1, 1, 1, 0, 1, 1, 1, 1, 1, 1],
    }
  },
  movie3: {
    seats: {
      A: [1, 0, 0, 0, 0, 1, 0, 1, 1, 1],
      B: [1, 1, 1, 0, 0, 1, 1, 1, 1, 1],
      C: [1, 0, 0, 0, 0, 1, 0, 1, 1, 1],
      D: [1, 1, 0, 0, 0, 1, 1, 0, 1, 1],
      E: [1, 1, 1, 0, 1, 1, 1, 1, 1, 1],
    }
  },
```

File Edit Selection View Go Run Terminal Help
• // JavaScript code • Untitled-2 - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
Final execution code - Seenuvasan Movie website.html
<!DOCTYPE html> Untitled-1
// JavaScript code Untitled-2 1
Restricted Mode
Ln 33, Col 5 Spaces: 2 UTF-8 CRLF {} JavaScript
29°C Mostly clear
Search
12:46 AM 09-05-2023



Movie Ticket Booking
Movie Ticket Booking - Now Sho
Movie Ticket Booking - Booking
Movie Booking Website
Movie Ticket Booking
File | D:/Worldline%20Training/Assignments/Assignment%208/showing%20page.html
Gmail YouTube Translate News Maps
Other bookmarks
29°C Mostly clear
Search
12:58 AM 09-05-2023

Now Showing

- Movie 1 Poster

  ### Movie 1

  Showtimes:

  - 10:00am
  - 2:00pm
  - 7:00pm
- Movie 2 Poster

  ### Movie 2

  Showtimes:

  - 11:00am
  - 3:00pm
  - 8:00pm
- Movie 3 Poster

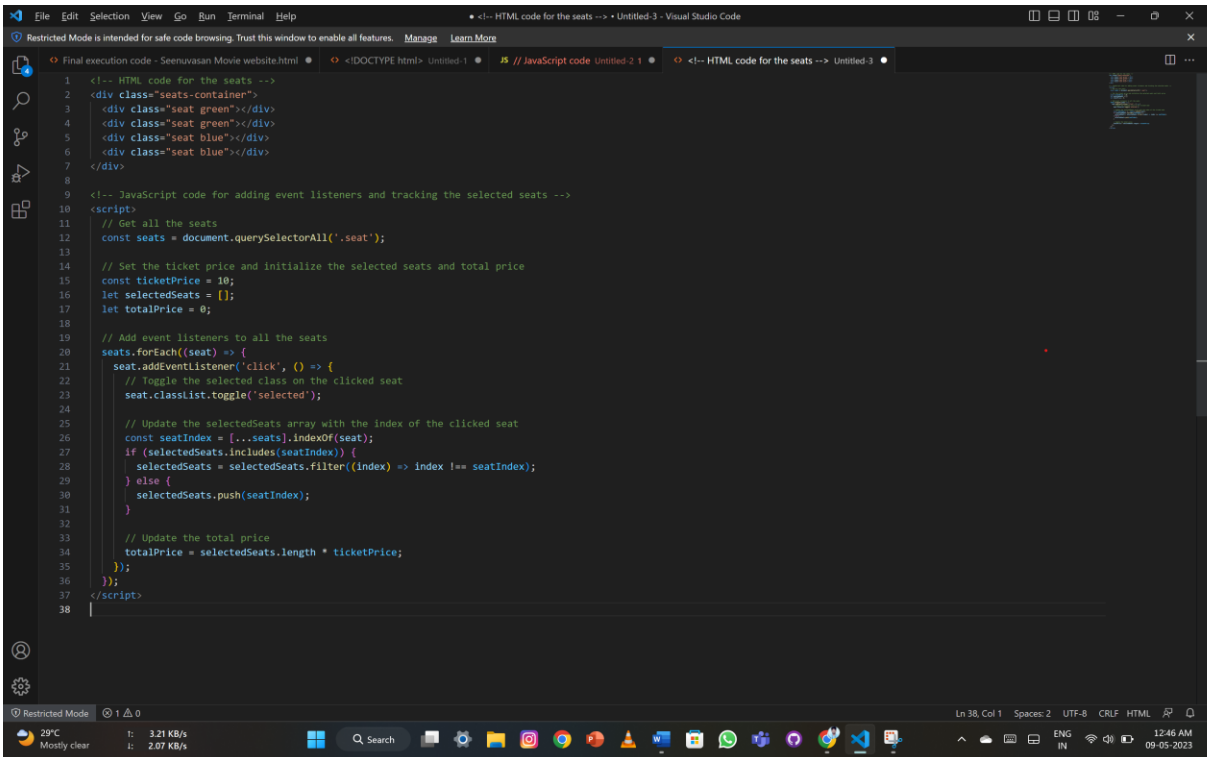
  ### Movie 3

  Showtimes:

  - 12:00pm
  - 4:00pm
  - 9:00pm

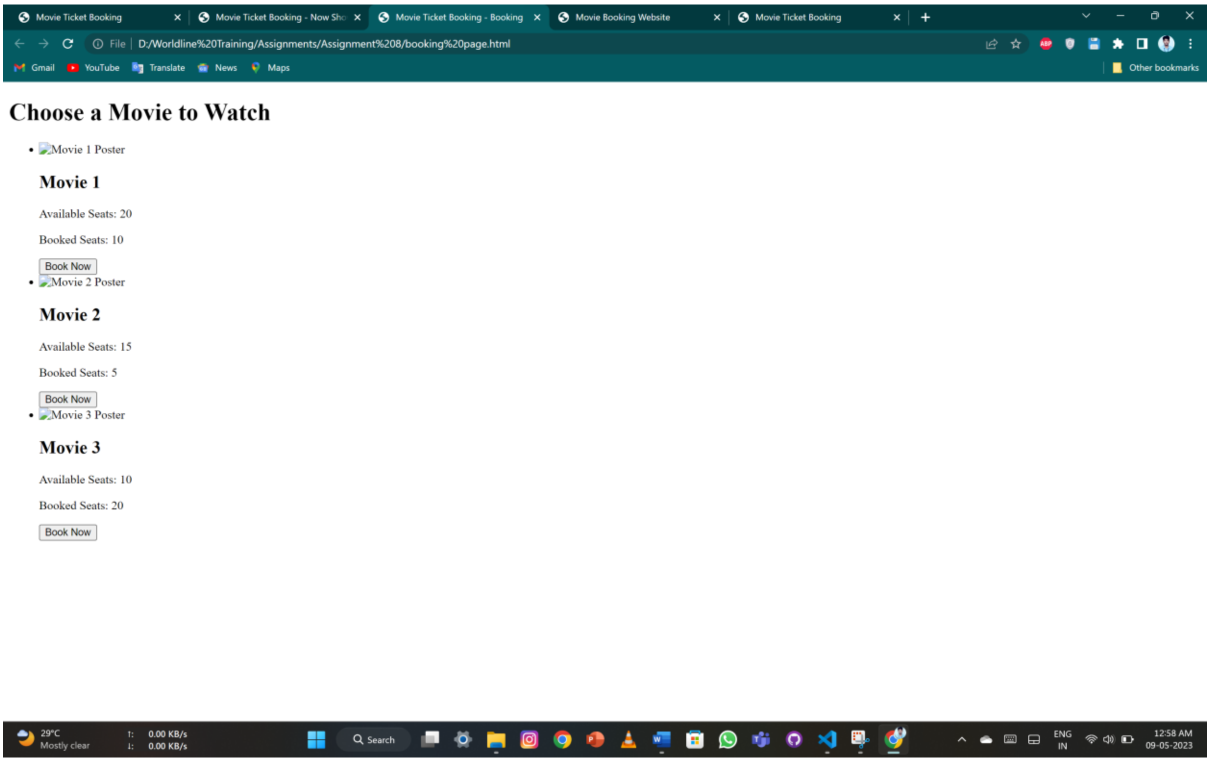
3. Add an event listener to each seat that changes the color of the seat to yellow when it is clicked:

- Use JavaScript to keep track of selected seats and calculate the tickets' total price. I can add an event listener to each seat that changes the color of the seat to yellow when it is clicked.



File Edit Selection View Go Run Terminal Help
• <!-- HTML code for the seats --> • Untitled-3 - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
Final execution code - Seenuvasan Movie website.html
<!DOCTYPE html> Untitled-1
// JavaScript code Untitled-2 1
<!-- HTML code for the seats --> Untitled-3
Restricted Mode
Ln 38, Col 1 Spaces: 2 UTF-8 CRLF HTML

```html
<!-- HTML code for the seats -->
<div class="seats-container">
  <div class="seat green"></div>
  <div class="seat green"></div>
  <div class="seat blue"></div>
  <div class="seat blue"></div>
</div>

<!-- JavaScript code for adding event listeners and tracking the selected seats -->
<script>
  // Get all the seats
  const seats = document.querySelectorAll('.seat');

  // Set the ticket price and initialize the selected seats and total price
  const ticketPrice = 10;
  let selectedSeats = [];
  let totalPrice = 0;

  // Add event listeners to all the seats
  seats.forEach((seat) => {
    seat.addEventListener('click', () => {
      // Toggle the selected class on the clicked seat
      seat.classList.toggle('selected');

      // Update the selectedSeats array with the index of the clicked seat
      const seatIndex = [...seats].indexOf(seat);
      if (selectedSeats.includes(seatIndex)) {
        selectedSeats = selectedSeats.filter((index) => index !== seatIndex);
      } else {
        selectedSeats.push(seatIndex);
      }

      // Update the total price
      totalPrice = selectedSeats.length * ticketPrice;
    });
  });
</script>
```



Movie Ticket Booking
Movie Ticket Booking - Now Sho
Movie Ticket Booking - Booking
Movie Booking Website
Movie Ticket Booking
File D:/Worldline%20Training/Assignments/Assignment%208/booking%20page.html
Gmail
YouTube
Translate
News
Maps
Other bookmarks

Choose a Movie to Watch

- Movie 1 Poster

  Movie 1

  Available Seats: 20

  Booked Seats: 10

  Book Now
- Movie 2 Poster

  Movie 2

  Available Seats: 15

  Booked Seats: 5

  Book Now
- Movie 3 Poster

  Movie 3

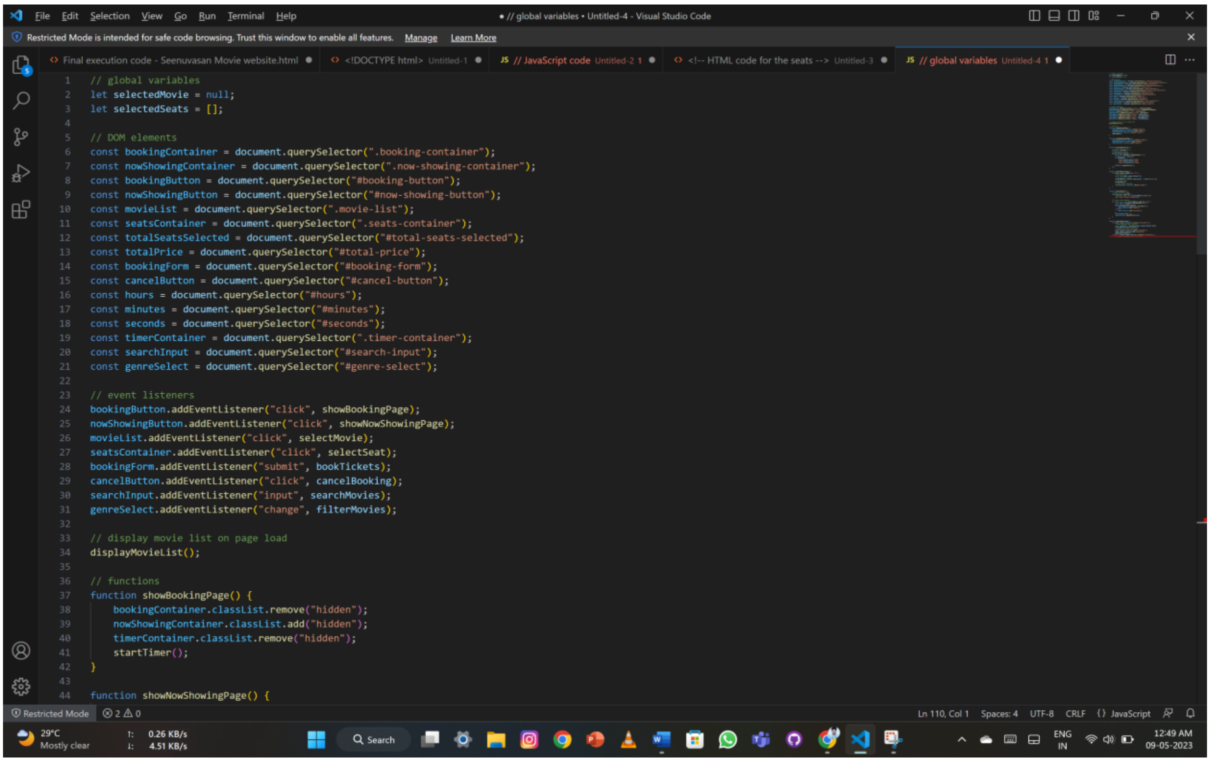
  Available Seats: 10

  Booked Seats: 20

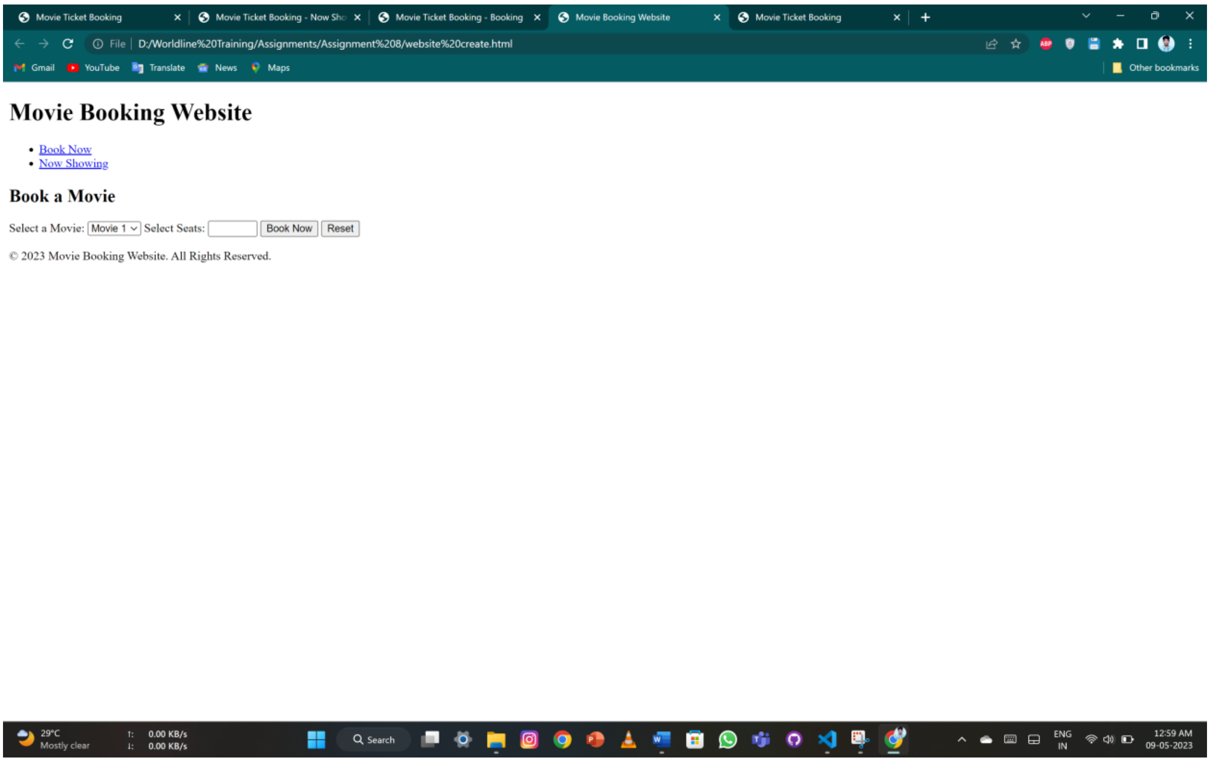
  Book Now

4. Add form validation:

- To ensure that the user selects at least one seat before submitting the form, I can add form validation. If the user tries to submit the form without selecting any seats, display an error message.



```
// global variables
let selectedMovie = null;
let selectedSeats = [];

// DOM elements
const bookingContainer = document.querySelector(".booking-container");
const nowShowingContainer = document.querySelector(".now-showing-container");
const bookingButton = document.querySelector("#booking-button");
const nowShowingButton = document.querySelector("#now-showing-button");
const movieList = document.querySelector(".movie-list");
const seatsContainer = document.querySelector(".seats-container");
const totalSeatsSelected = document.querySelector("#total-seats-selected");
const totalPrice = document.querySelector("#total-price");
const bookingForm = document.querySelector("#booking-form");
const cancelButton = document.querySelector("#cancel-button");
const hours = document.querySelector("#hours");
const minutes = document.querySelector("#minutes");
const seconds = document.querySelector("#seconds");
const timerContainer = document.querySelector(".timer-container");
const searchInput = document.querySelector("#search-input");
const genreSelect = document.querySelector("#genre-select");

// event listeners
bookingButton.addEventListener("click", showBookingPage);
nowShowingButton.addEventListener("click", showNowShowingPage);
movieList.addEventListener("click", selectMovie);
seatsContainer.addEventListener("click", selectSeat);
bookingForm.addEventListener("submit", bookTickets);
cancelButton.addEventListener("click", cancelBooking);
searchInput.addEventListener("input", searchMovies);
genreSelect.addEventListener("change", filterMovies);

// display movie list on page load
displayMovieList();

// functions
function showBookingPage() {
    bookingContainer.classList.remove("hidden");
    nowShowingContainer.classList.add("hidden");
    timerContainer.classList.remove("hidden");
    startTimer();
}

function showNowShowingPage() {
```



D:/Worldline%20Training/Assignments/Assignment%208/website%20create.html

Movie Booking Website

- Book Now
- Now Showing

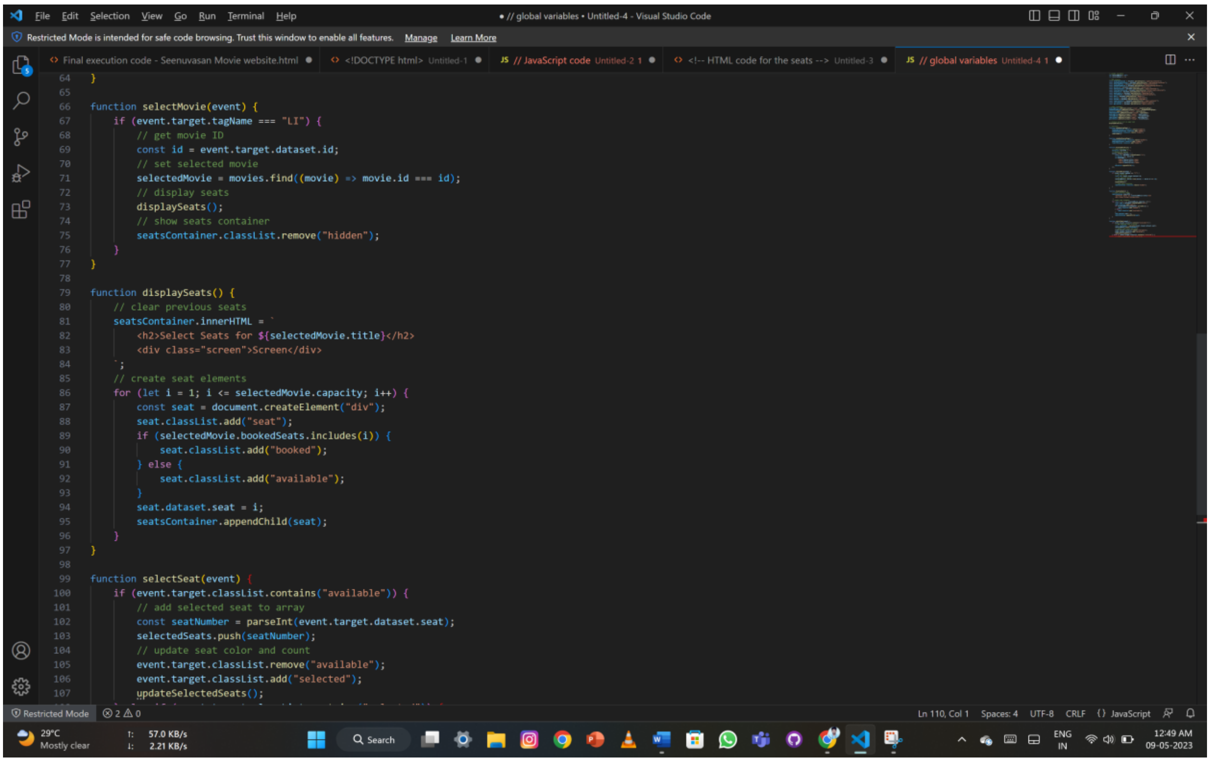
Book a Movie

Select a Movie: Movie 1 Select Seats: Book Now Reset

© 2023 Movie Booking Website. All Rights Reserved.

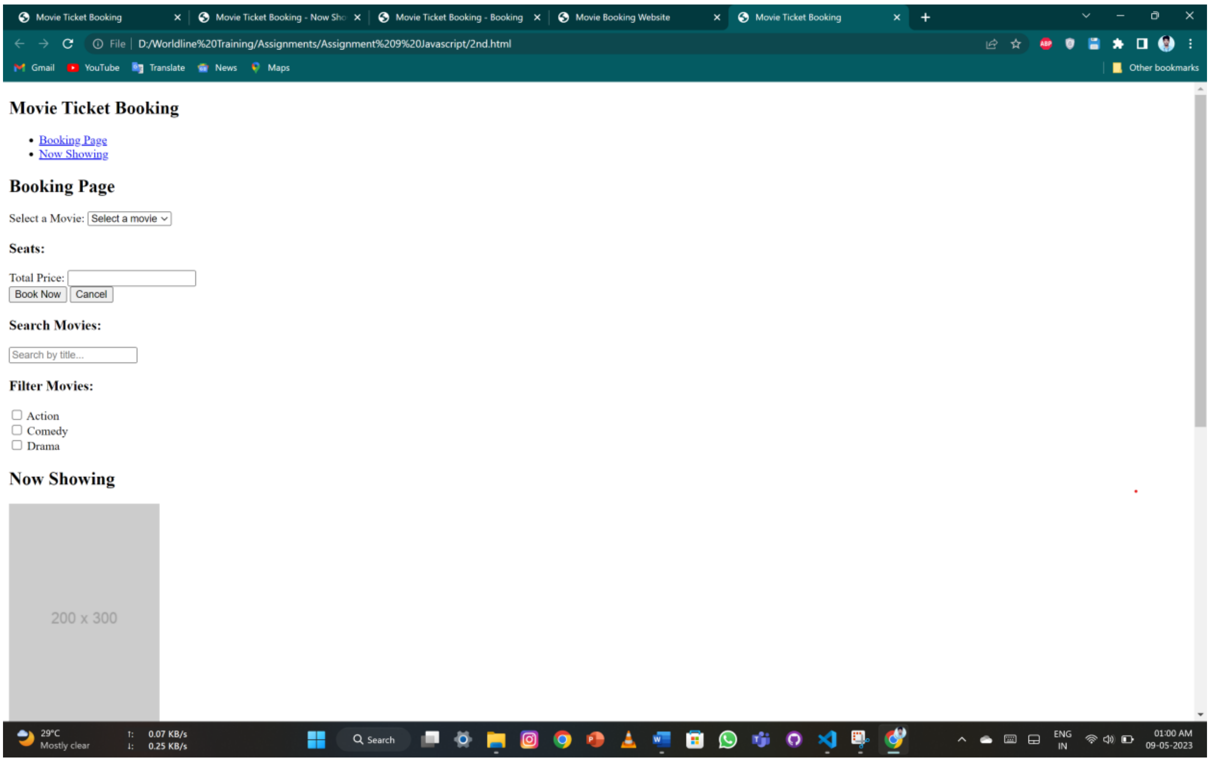
5. Display the total number of seats booked and the total price:

- To display the total number of seats booked and the total price to be paid at the bottom of the booking page, use JavaScript to keep track of the selected seats and calculate the total price.



```
}

function selectMovie(event) {
    if (event.target.tagName === "LI") {
        // get movie ID
        const id = event.target.dataset.id;
        // set selected movie
        selectedMovie = movies.find((movie) => movie.id === id);
        // display seats
        displaySeats();
        // show seats container
        seatsContainer.classList.remove("hidden");
    }
}

function displaySeats() {
    // clear previous seats
    seatsContainer.innerHTML = `
        <h2>Select Seats for ${selectedMovie.title}</h2>
        <div class="screen">Screen</div>
    `;
    // create seat elements
    for (let i = 1; i <= selectedMovie.capacity; i++) {
        const seat = document.createElement("div");
        seat.classList.add("seat");
        if (selectedMovie.bookedSeats.includes(i)) {
            seat.classList.add("booked");
        } else {
            seat.classList.add("available");
        }
        seat.dataset.seat = i;
        seatsContainer.appendChild(seat);
    }
}

function selectSeat(event) {
    if (event.target.classList.contains("available")) {
        // add selected seat to array
        const seatNumber = parseInt(event.target.dataset.seat);
        selectedSeats.push(seatNumber);
        // update seat color and count
        event.target.classList.remove("available");
        event.target.classList.add("selected");
        updateSelectedSeats();
```

File Edit Selection View Go Run Terminal Help
• // global variables • Untitled-4 - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
Final execution code - Seenuvasan Movie website.html
<!DOCTYPE html> Untitled-1
// JavaScript code Untitled-2
<!-- HTML code for the seats --> Untitled-3
// global variables Untitled-4
Restricted Mode
Ln 110, Col 1 Spaces: 4 UTF-8 CRLF JavaScript
29°C Mostly clear
Search
12:49 AM 09-05-2023



Movie Ticket Booking
Movie Ticket Booking - Now Sho
Movie Ticket Booking - Booking
Movie Booking Website
Movie Ticket Booking
File D:/Worldline%20Training/Assignments/Assignment%209%20Javascript/2nd.html
Gmail YouTube Translate News Maps
Other bookmarks
200 x 300
29°C Mostly clear
Search
01:00 AM 09-05-2023

Movie Ticket Booking

- Booking Page
- Now Showing

Booking Page

Select a Movie: Select a movie

Seats:

Total Price:

Book Now Cancel

Search Movies:

Search by title...

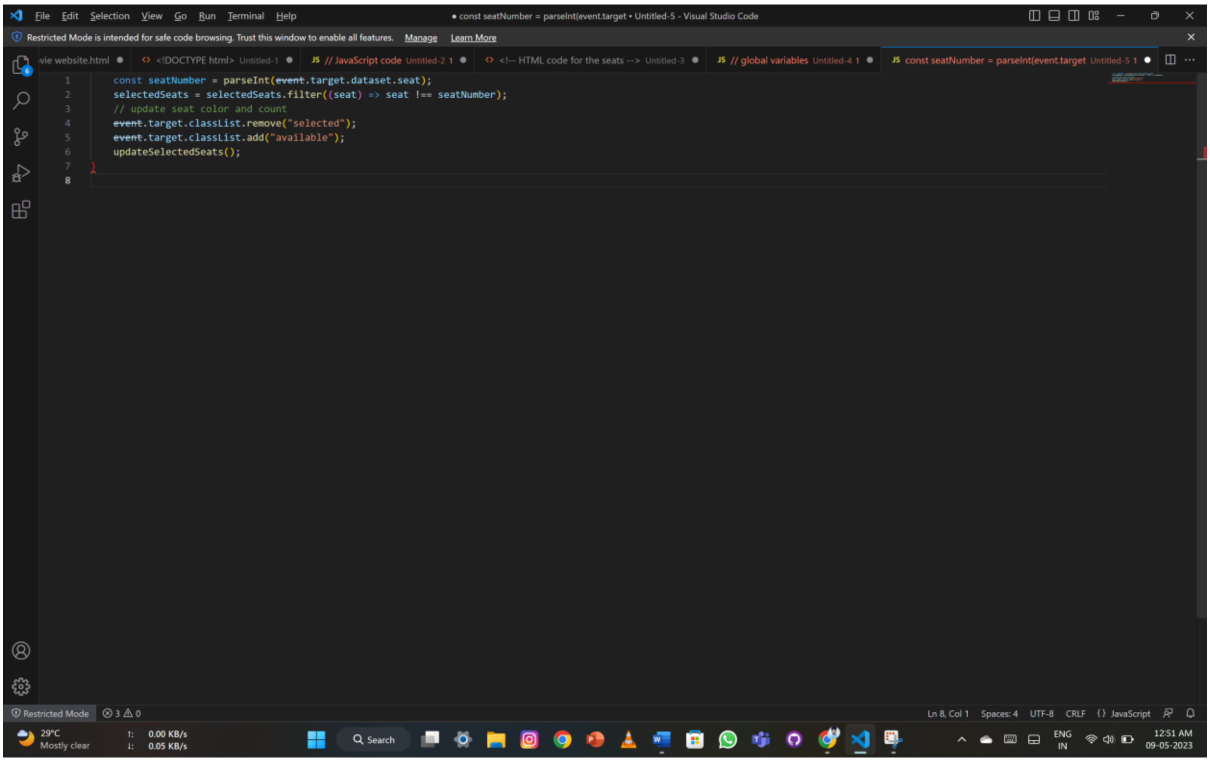
Filter Movies:

□ Action
□ Comedy
□ Drama

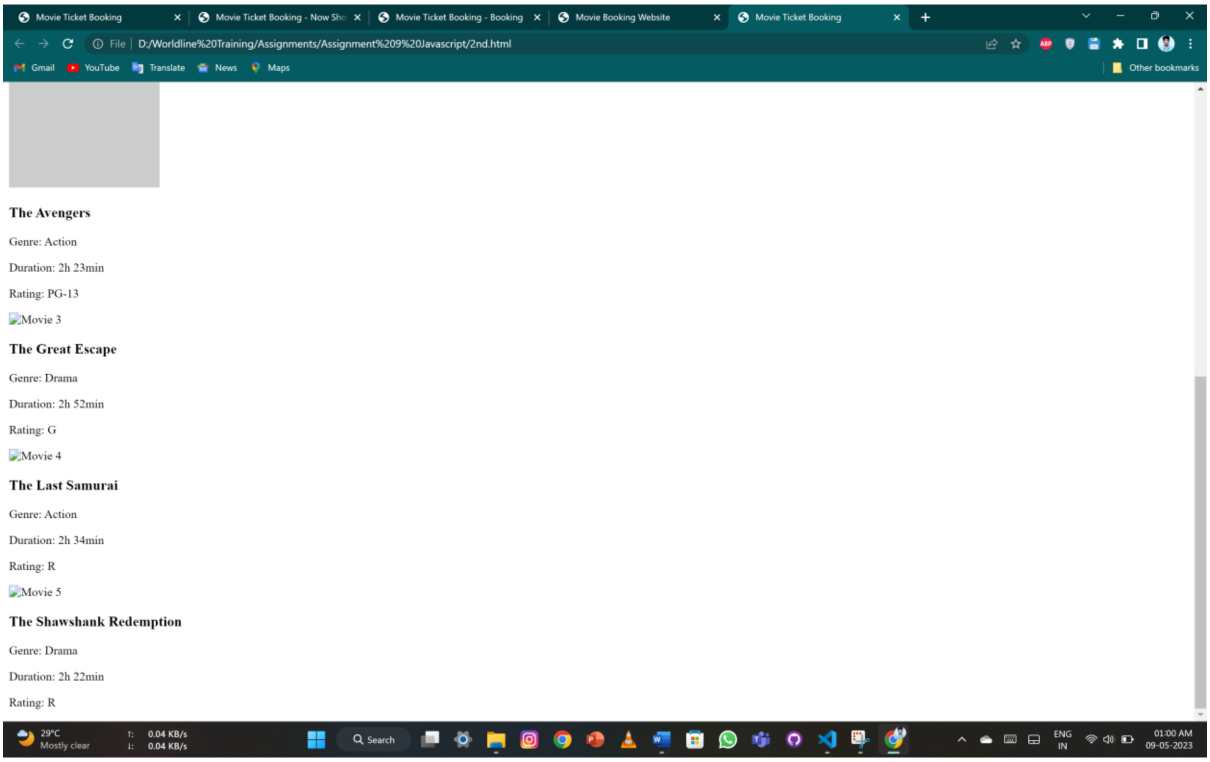
Now Showing

6. Add a feature that allows users to cancel their booking:

- To add a feature that allows users to cancel their booking by clicking on the seats that they have already booked, use JavaScript to change the color of the seat back to blue, and update the total number of seats booked and the total price accordingly.



```
    const seatNumber = parseInt(event.target.dataset.seat);
    selectedSeats = selectedSeats.filter((seat) => seat !== seatNumber);
    // update seat color and count
    event.target.classList.remove("selected");
    event.target.classList.add("available");
    updateSelectedSeats();
}
```



The Avengers

Genre: Action

Duration: 2h 23min

Rating: PG-13

Movie 3

The Great Escape

Genre: Drama

Duration: 2h 52min

Rating: G

Movie 4

The Last Samurai

Genre: Action

Duration: 2h 34min

Rating: R

Movie 5

The Shawshank Redemption

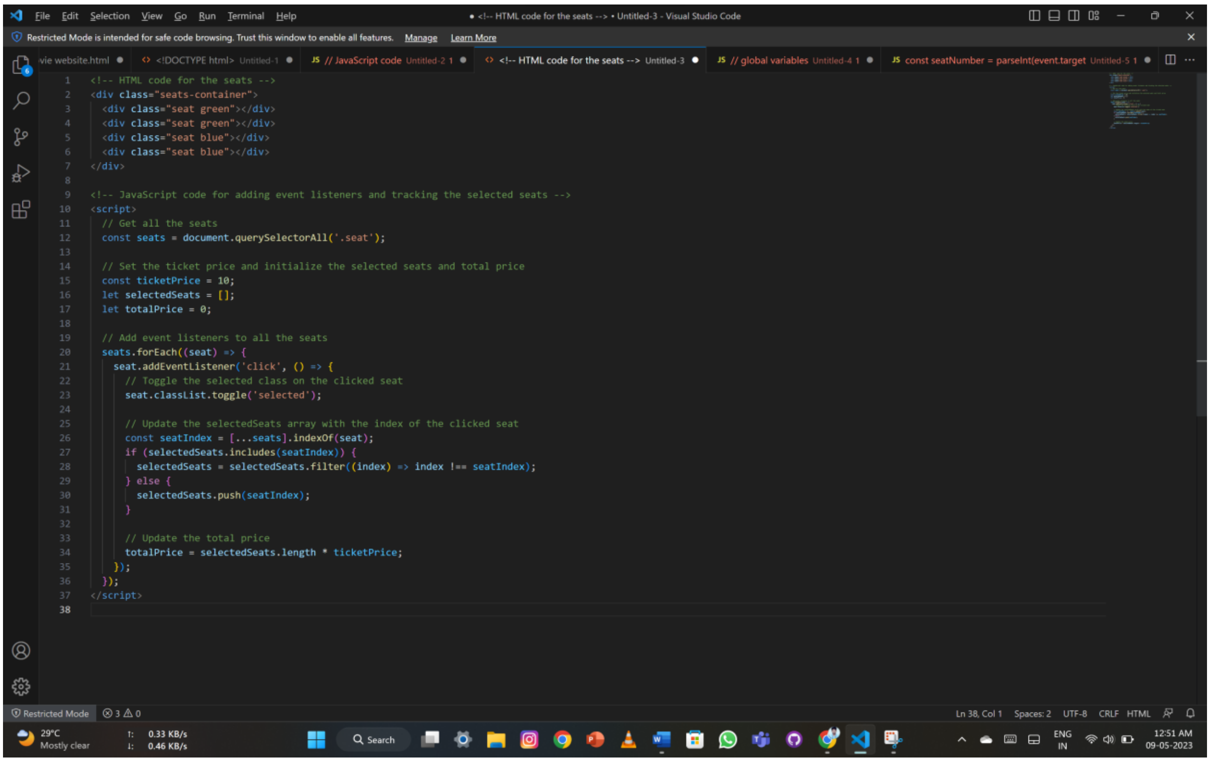
Genre: Drama

Duration: 2h 22min

Rating: R

7. Use JavaScript to create a timer:

- To create a timer that counts down the time left until the next show starts, use JavaScript to create a timer and display it on the booking page.



```
<!-- HTML code for the seats -->
<div class="seats-container">
  <div class="seat green"></div>
  <div class="seat green"></div>
  <div class="seat blue"></div>
  <div class="seat blue"></div>
</div>

<!-- JavaScript code for adding event listeners and tracking the selected seats -->
<script>
  // Get all the seats
  const seats = document.querySelectorAll('.seat');

  // Set the ticket price and initialize the selected seats and total price
  const ticketPrice = 10;
  let selectedSeats = [];
  let totalPrice = 0;

  // Add event listeners to all the seats
  seats.forEach((seat) => {
    seat.addEventListener('click', () => {
      // Toggle the selected class on the clicked seat
      seat.classList.toggle('selected');

      // Update the selectedSeats array with the index of the clicked seat
      const seatIndex = [...seats].indexOf(seat);
      if (selectedSeats.includes(seatIndex)) {
        selectedSeats = selectedSeats.filter((index) => index !== seatIndex);
      } else {
        selectedSeats.push(seatIndex);
      }

      // Update the total price
      totalPrice = selectedSeats.length * ticketPrice;
    });
  });
</script>
```

File Edit Selection View Go Run Terminal Help
• <!-- HTML code for the seats --> • Untitled-3 - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
vie website.html
<!DOCTYPE html> Untitled-1
// JavaScript code Untitled-2 1
<!-- HTML code for the seats --> Untitled-3
// global variables Untitled-4 1
const seatNumber = parseInt(event.target Untitled-5 1
Restricted Mode
Ln 38, Col 1 Spaces: 2 UTF-8 CRLF HTML
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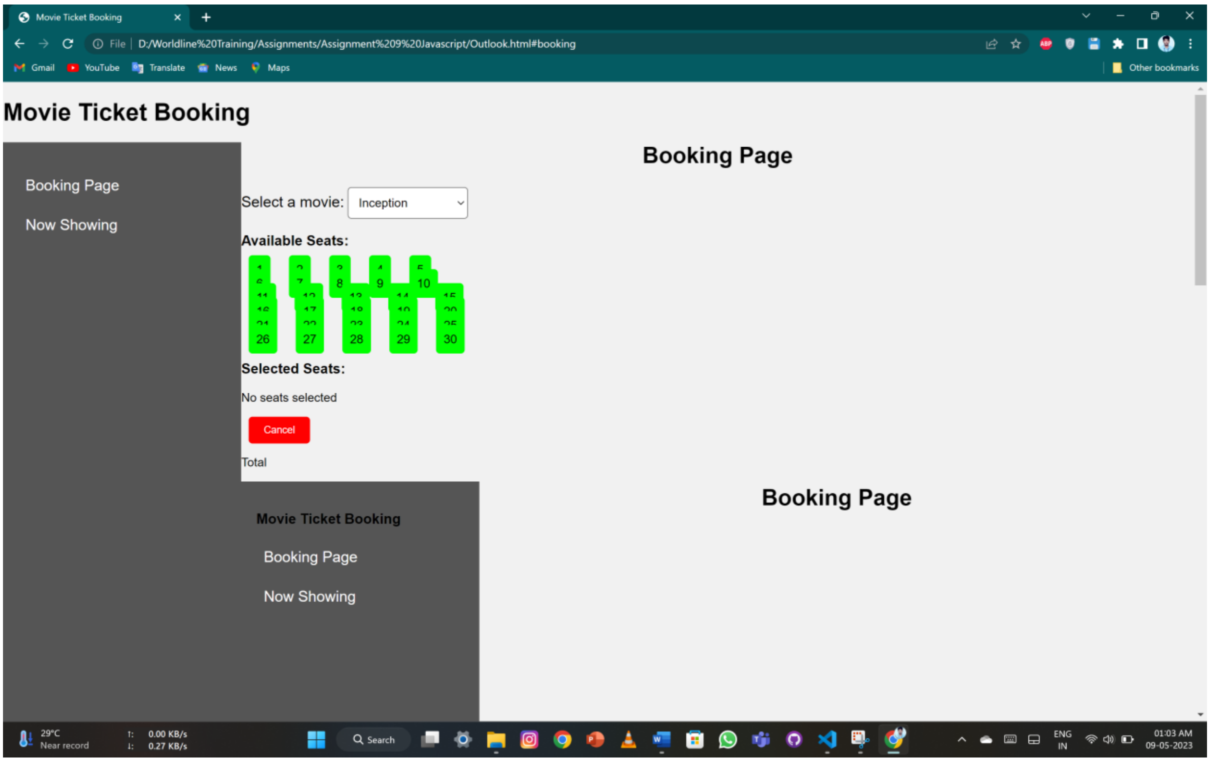
Search
12:51 AM
09-05-2023



Movie Ticket Booking

Booking Page

Select a movie: Inception

Available Seats:

Selected Seats:

No seats selected

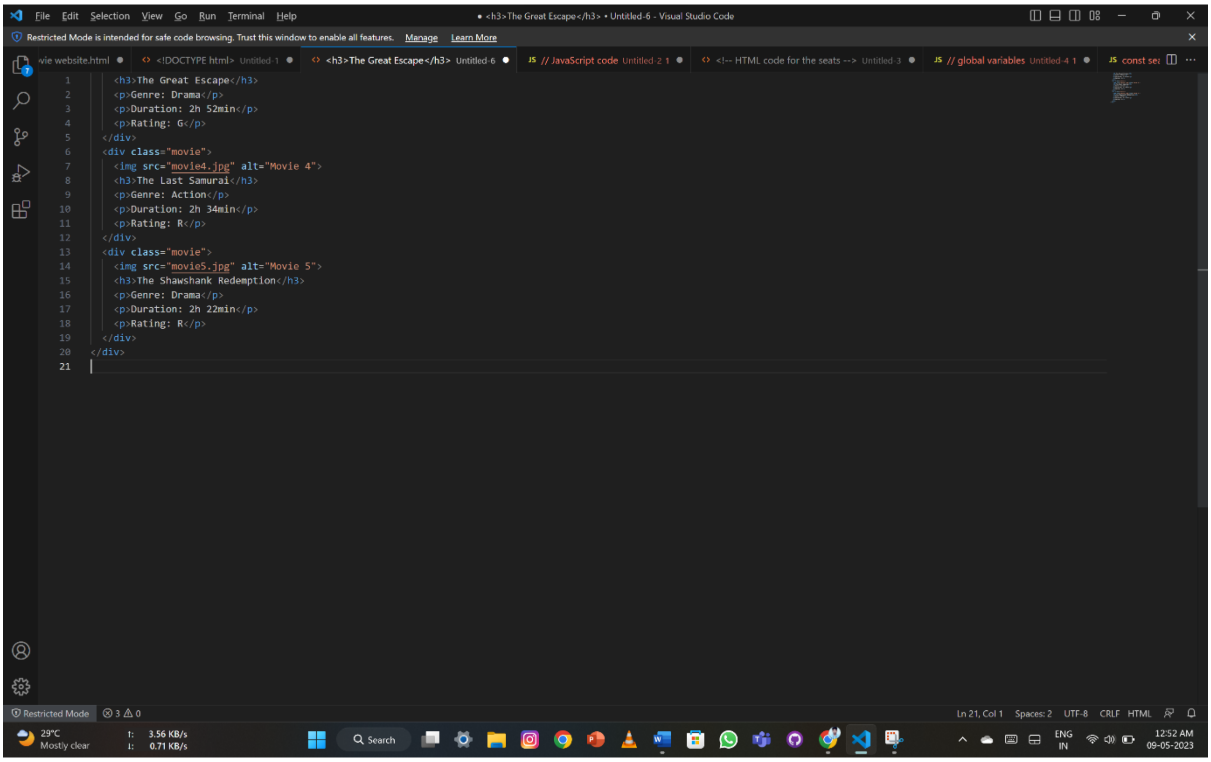
Total

Booking Page

Movie Ticket Booking
D:/Worldline%20Training/Assignments/Assignment%209%20Javascript/Outlook.html#booking
Gmail
YouTube
Translate
News
Maps
Other bookmarks
Booking Page
Now Showing
8
9
10
26
27
28
29
30
Cancel
Movie Ticket Booking
Booking Page
Now Showing
29°C Near record
Search
01:03 AM
09-05-2023

8. Add a feature that allows users to search for movies by title:

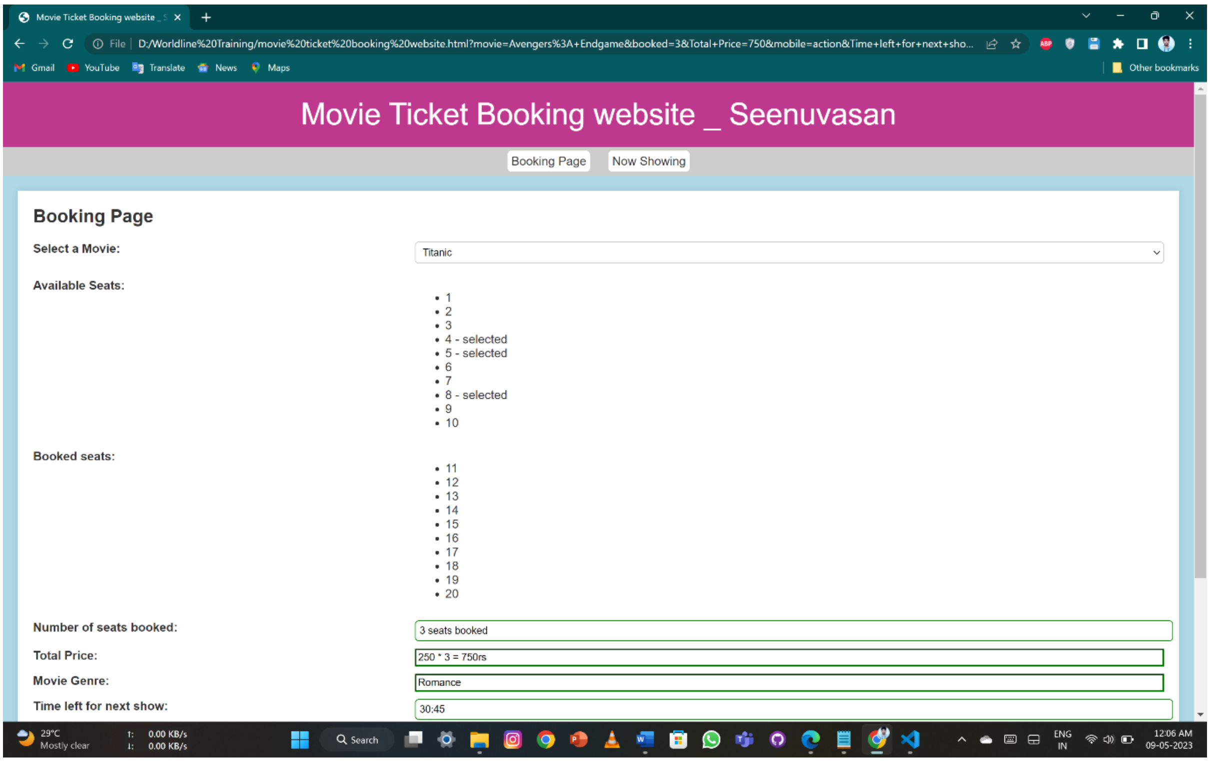
- To add a feature that allows users to search for movies by title.



```
    <h3>The Great Escape</h3>
    <p>Genre: Drama</p>
    <p>Duration: 2h 52min</p>
    <p>Rating: G</p>
  </div>
  <div class="movie">
    <img src="movie4.jpg" alt="Movie 4">
    <h3>The Last Samurai</h3>
    <p>Genre: Action</p>
    <p>Duration: 2h 34min</p>
    <p>Rating: R</p>
  </div>
  <div class="movie">
    <img src="movie5.jpg" alt="Movie 5">
    <h3>The Shawshank Redemption</h3>
    <p>Genre: Drama</p>
    <p>Duration: 2h 22min</p>
    <p>Rating: R</p>
  </div>
</div>

```

File Edit Selection View Go Run Terminal Help
• <h3>The Great Escape</h3> • Untitled-6 - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More
Restricted Mode ⊗ 3 ⚠ 0
Ln 21, Col 1 Spaces: 2 UTF-8 CRLF HTML
12:52 AM 09-05-2023



Movie Ticket Booking website _ Seenuvasan

Booking Page | Now Showing

Booking Page

Select a Movie: Titanic

Available Seats:

- 1
- 2
- 3
- 4 - selected
- 5 - selected
- 6
- 7
- 8 - selected
- 9
- 10

Booked seats:

- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Number of seats booked: 3 seats booked

Total Price: 250 * 3 = 750rs

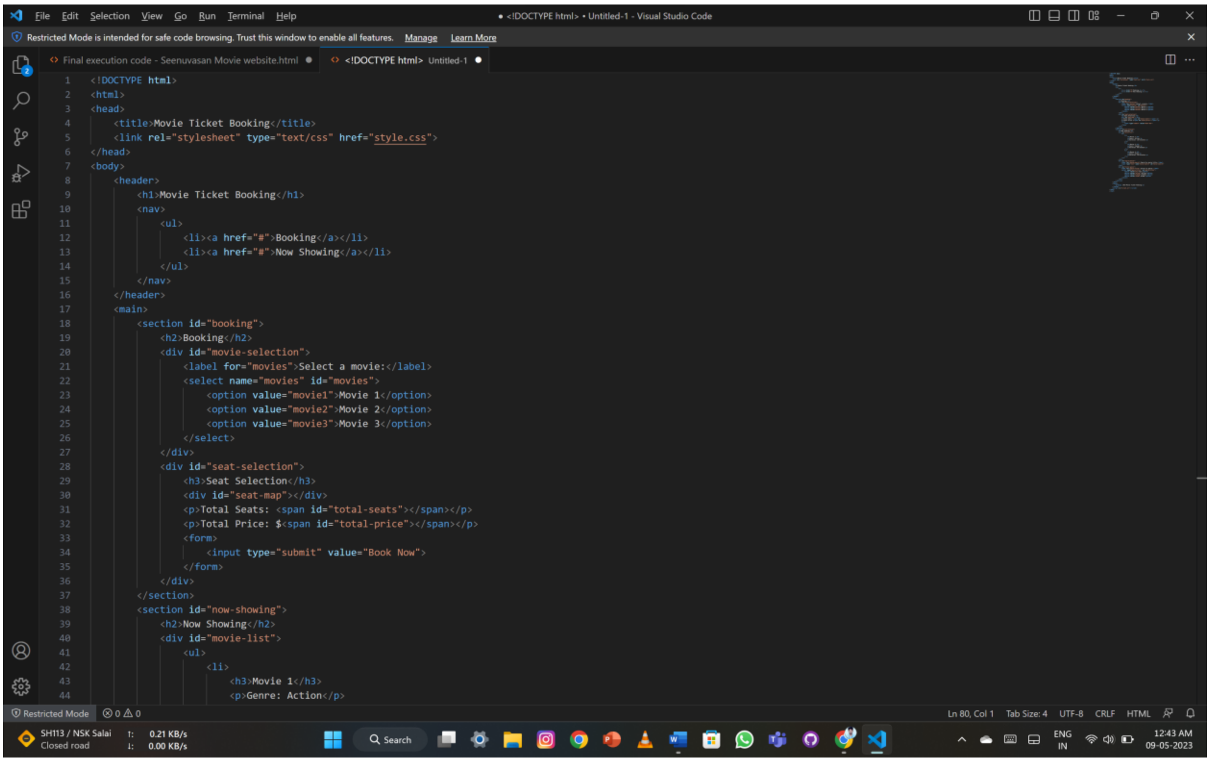
Movie Genre: Romance

Time left for next show: 30:45

Movie Ticket Booking website
D:/Worldline%20Training/movie%20ticket%20booking%20website.html?movie=Avengers%3A+Endgame&booked=3&Total+Price=750&mobile=action&Time+left+for+next+sho...
Gmail YouTube Translate News Maps Other bookmarks
12:06 AM 09-05-2023

9. Add a feature that allows users to filter movies by genre:

- To add a feature that allows users to filter movies by genre, use JavaScript to dynamically.


File Edit Selection View Go Run Terminal Help
● <!DOCTYPE html> • Untitled-1 - Visual Studio Code
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Final execution code - Seenuvasan Movie website.html
<!DOCTYPE html> Untitled-1
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Ln 80, Col 1 Tab Size: 4 UTF-8 CRLF HTML
SH113 / NSK Salai
Closed road
Search
12:43 AM
09-05-2023

```html
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    <main>
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            <h2>Booking</h2>
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                <select name="movies" id="movies">
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                    <option value="movie2">Movie 2</option>
                    <option value="movie3">Movie 3</option>
                </select>
            </div>
            <div id="seat-selection">
                <h3>Seat Selection</h3>
                <div id="seat-map"></div>
                <p>Total Seats: <span id="total-seats"></span></p>
                <p>Total Price: $<span id="total-price"></span></p>
                <form>
                    <input type="submit" value="Book Now">
                </form>
            </div>
        </section>
        <section id="now-showing">
            <h2>Now Showing</h2>
            <div id="movie-list">
                <ul>
                    <li>
                        <h3>Movie 1</h3>
                        <p>Genre: Action</p>
```
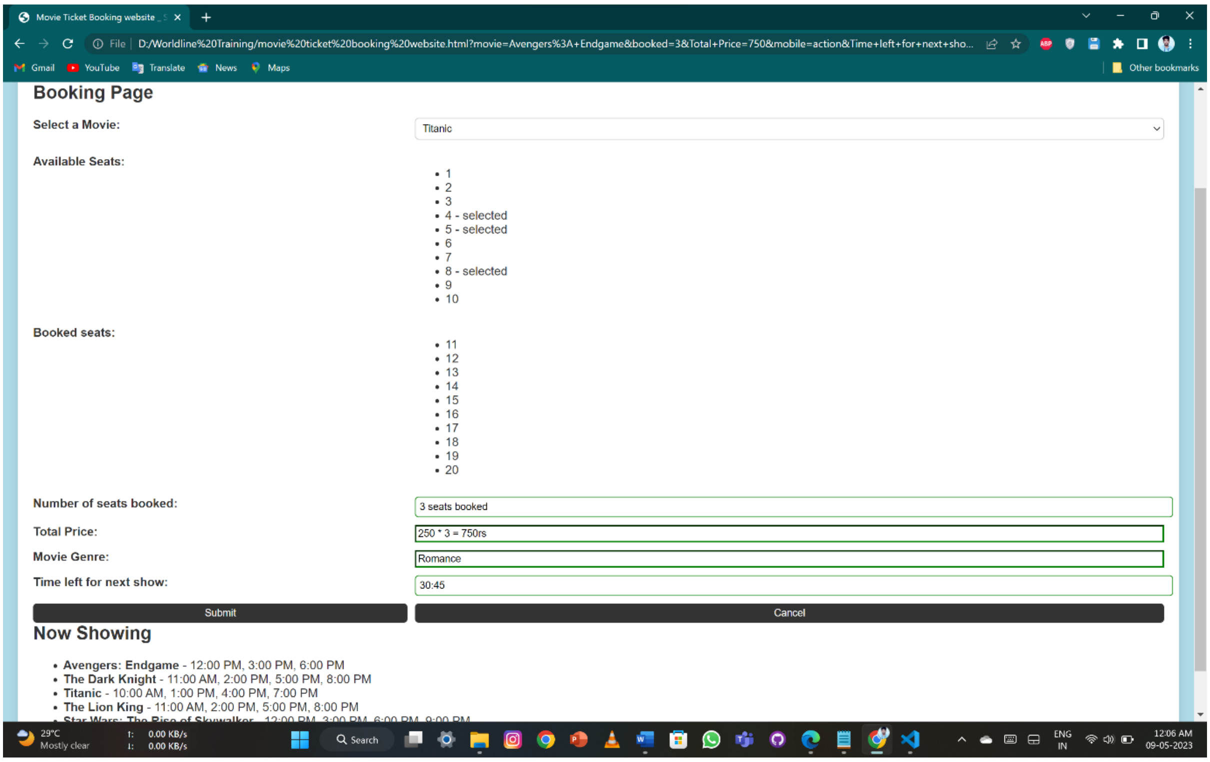


Movie Ticket Booking website
D:/Worldline%20Training/movie%20ticket%20booking%20website.html?movie=Avengers%3A+Endgame&booked=3&Total+Price=750&mobile=action&Time+left+for+next+sho...
Gmail
YouTube
Translate
News
Maps
Other bookmarks
29°C
Mostly clear
Search
12:06 AM
09-05-2023

Booking Page

Select a Movie: Titanic

Available Seats:

- 1
- 2
- 3
- 4 - selected
- 5 - selected
- 6
- 7
- 8 - selected
- 9
- 10

Booked seats:

- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Number of seats booked: 3 seats booked

Total Price: 250 * 3 = 750rs

Movie Genre: Romance

Time left for next show: 30:45

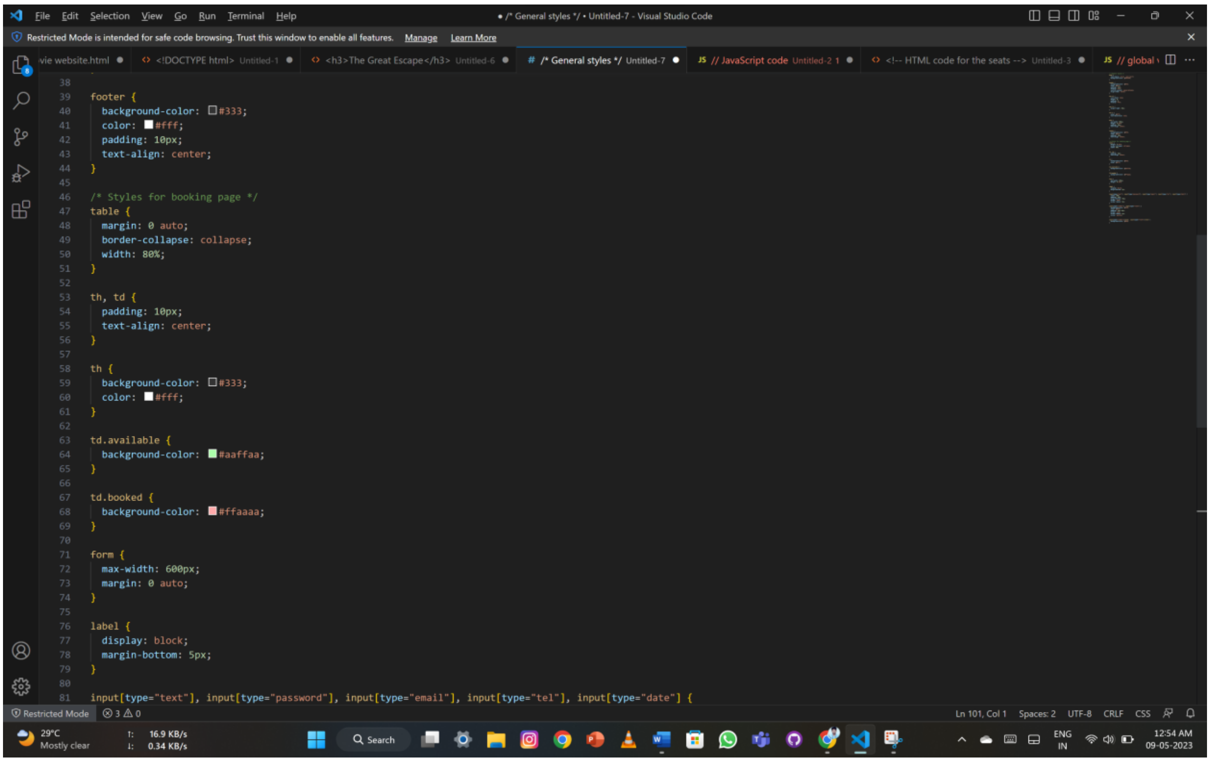
Submit Cancel

Now Showing

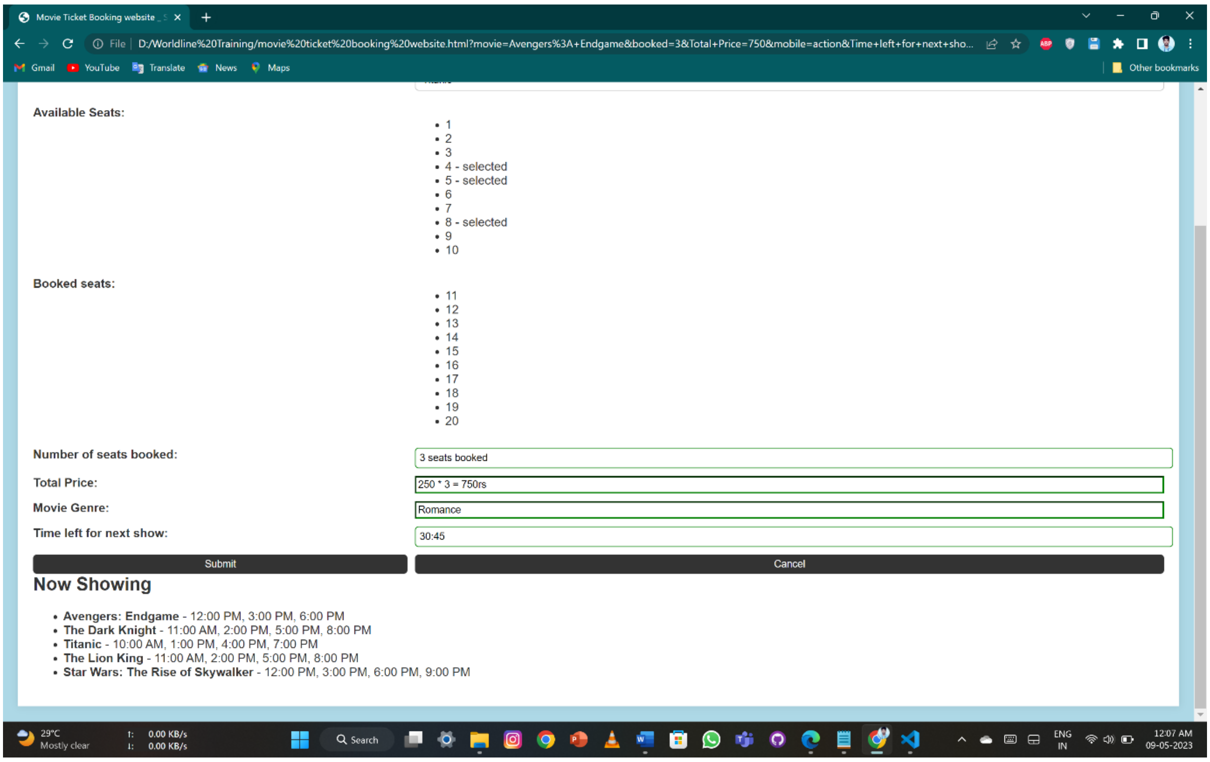
- **Avengers: Endgame** - 12:00 PM, 3:00 PM, 6:00 PM
- **The Dark Knight** - 11:00 AM, 2:00 PM, 5:00 PM, 8:00 PM
- **Titanic** - 10:00 AM, 1:00 PM, 4:00 PM, 7:00 PM
- **The Lion King** - 11:00 AM, 2:00 PM, 5:00 PM, 8:00 PM
- **Star Wars: The Rise of Skywalker** - 12:00 PM, 3:00 PM, 6:00 PM, 9:00 PM

10. Use CSS styling to enhance the user interface:

- Use CSS styling to enhance the user interface and make the website visually appeal.



```
footer {
  background-color: #333;
  color: #fff;
  padding: 10px;
  text-align: center;
}

/* Styles for booking page */
table {
  margin: 0 auto;
  border-collapse: collapse;
  width: 80%;
}

th, td {
  padding: 10px;
  text-align: center;
}

th {
  background-color: #333;
  color: #fff;
}

td.available {
  background-color: #aaffaa;
}

td.booked {
  background-color: #ffaaaa;
}

form {
  max-width: 600px;
  margin: 0 auto;
}

label {
  display: block;
  margin-bottom: 5px;
}

input[type="text"], input[type="password"], input[type="email"], input[type="tel"], input[type="date"] {
```



D:/Worldline%20Training/movie%20ticket%20booking%20website.html?movie=Avengers%3A+Endgame&booked=3&Total+Price=750&mobile=action&Time+left+for+next+sho...

Available Seats:

- 1
- 2
- 3
- 4 - selected
- 5 - selected
- 6
- 7
- 8 - selected
- 9
- 10

Booked seats:

- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Number of seats booked: 3 seats booked

Total Price: 250 * 3 = 750rs

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