Index.html

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <title>Bus Reservation System</title>

  <link rel="stylesheet" href="style.css">

</head>

<body>

  <h1>Bus Reservation System</h1>

  <form id="reservationForm">

    <label>Ticket ID: <input type="text" id="ticketId" required></label><br>

    <label>Passenger Name: <input type="text" id="passengerName" required></label><br>

    <label>Bus No: <input type="text" id="busNo" required></label><br>

    <label>Date: <input type="date" id="date" required></label><br>

    <label>Seat No: <input type="number" id="seatNo" min="1" max="50" required></label><br>

    <label>Fare: <input type="number" id="fare" required></label><br>

    <button type="submit">Book Seat</button>

  </form>

  <div id="output"></div>

  <script src="script.js"></script>

</body>

</html>

Style.css

body {

  font-family: Arial, sans-serif;

  margin: 20px;

  background: #f0f8ff;

}

form {

  background: #fff;

  padding: 15px;

  border-radius: 8px;

  width: 300px;

  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

}

label {

  display: block;

  margin-bottom: 10px;

}

button {

  padding: 8px 15px;

  background-color: #007bff;

  color: white;

  border: none;

  border-radius: 4px;

}

#output {

  margin-top: 20px;

  padding: 10px;

}

Script.js

// Closure to manage and verify seat bookings

const SeatBooking = (function () {

  const bookedSeats = new Set();

  return {

    isBooked: function (seat) {

      return bookedSeats.has(seat);

    },

    bookSeat: function (seat) {

      if (this.isBooked(seat)) {

        return false;

      }

      bookedSeats.add(seat);

      return true;

    }

  };

})();

document.getElementById("reservationForm").addEventListener("submit", function (e) {

  e.preventDefault();

  const ticketId = document.getElementById("ticketId").value;

  const passengerName = document.getElementById("passengerName").value;

  const busNo = document.getElementById("busNo").value;

  const date = document.getElementById("date").value;

  const seatNo = parseInt(document.getElementById("seatNo").value);

  const fare = document.getElementById("fare").value;

  if (SeatBooking.isBooked(seatNo)) {

    document.getElementById("output").innerHTML = `<p style="color:red;">Seat No ${seatNo} is already booked.</p>`;

  } else {

    SeatBooking.bookSeat(seatNo);

    document.getElementById("output").innerHTML = `

      <p style="color:green;"><strong>Booking Confirmed!</strong></p>

      <ul>

        <li>Ticket ID: ${ticketId}</li>

        <li>Name: ${passengerName}</li>

        <li>Bus No: ${busNo}</li>

        <li>Date: ${date}</li>

        <li>Seat No: ${seatNo}</li>

        <li>Fare: ₹${fare}</li>

      </ul>

    `;

    this.reset();

  }

});

Output



