NAS TRAVELS BUS TICKET BOOKING WEBSITE

Introduction:

The aim of this project is to design and develop a bus ticket reservation website using HTML, CSS, and JavaScript. This website will allow users to book bus tickets online, choose their preferred seats, and make payments. The website will also provide users with information on bus schedules, routes, and fares.

Features:

- 1. Home page: The home page will be the first page that users will see when they visit the website. It will contain information about the company and booking page.
- 2. Booking page: Booking page contains from , to ,date of journey and number of seats.
- 3. Seat selection: Users will be able to select their preferred seats on the bus. The website will show them a graphical representation of the bus layout, and they will be able to select seats by clicking on them.
- 4. Payment gateway: The website will have a secure payment gateway that will allow users to make payments using their net banking or G pay directly by clicking book and pay button without redirecting to other page.
- 5. Available class: First class and economy class are available for the users.

Users can select their preferred class.

6. Contact page: The website will have a contact page that will allow users to get in touch with the company in case of any queries or issues.

Technologies Used:

The bus ticket reservation website will be developed using HTML, CSS, and JavaScript. HTML will be used to structure the content of the website, while CSS will be used to style it. JavaScript will be used to add interactivity to the website, such as seat selection and payment process.

Conclusion:

The bus ticket reservation website will provide users with a convenient and easy way to book bus tickets online. It will be user-friendly, secure, and provide users with all the necessary information they need to make informed decisions. The use of HTML, CSS, and JavaScript will ensure that the website is responsive and works seamlessly across different devices.

ai.html

```
<!DOCTYPE html>
<html>
<head>
<title>NAS TRAVELS</title>
<title>Bus Ticket Booking</title>
link rel="stylesheet" href="style1.css">
</head>
<body><header>
<h1>NAS TRAVELS<br>Bus Ticket Booking</h1>
<nav>

li><a href="ai.html">Home</a>
```

```
<a href="#About Us">About Us</a>
      </nav>
</header>
      <form>
             <label for="from">From:</label>
             <input type="text" id="from" name="from">
             <label for="to">To:</label>
             <input type="text" id="to" name="to">
             <label for="date">Date:</label>
             <input type="date" id="date" name="date">
             <label for="seats">Number of seats:</label>
             <input type="number" id="seats" name="seats">
             <button type="button" onclick="bookTickets()">
href="C:\Users\cherian\Desktop\bus\index.html">bookTickets</a></button>
  </form>
      <div id="result"></div>
      <script src="script.js"></script><body>
             <h2>About Us</h2>
```

<h3 id="About Us">Our bus ticket booking website is committed to providing you with easy and hassle-free bus ticket bookings. We strive to offer a one-stop solution for all your bus travel needs, covering all major routes across the country. Our user-friendly platform allows you to search, compare, and book tickets within minutes. Our extensive network of bus operators ensures that you have access to a wide range of options that suit your preferences and budget. We take pride in our commitment to customer safety and comfort. All our bus operators are handpicked, and we ensure that they comply with all safety regulations. You can rest assured that you will experience a comfortable and safe journey with us. We also provide various payment options to make the booking process more convenient for you. You can pay easily using credit/debit cards, net banking, or e-wallets. Our dedicated customer support team is available 24/7 to assist you with any queries or issues you may have. In addition to booking bus tickets, we also offer various deals and discounts, making your travel experience even more affordable. We aim to provide you with a seamless and enjoyable journey, from start to finish. Choose us for your next bus journey and experience the convenience and comfort of hasslefree booking of bus tickets!

```
</footer>
<copy;2023 Bus Booking website.All Rights Reserved</p>
<contact us</p>
<ppas@gmail.com</p>
</footer>
</body>
</html>

Style 1.css

h1 {
    text-align: center;
    padding-left: 500px;
```

```
body {
  font-family: cursive;
  max-height: 100%;
  overflow: auto;
  background-color: #f6f7f8;
  background-image: url("C:/Users/cherian/Desktop/bus/try.jpg");
  background-repeat: no-repeat;
  background-size: cover;
  background-position:center;
  color: hsl(0, 5%, 7%);
  overflow-x: hidden;
}
header{
       background-color: #f6f7f8;
       color: black;
       display:flex;
       justify-content:space-between;
       align-items:center;
       padding: 1em;
}
nav li{
       display: inline-block;
       margin-right: 1em;
}
```

}

```
nav a{
       color: black;
       text-decoration: none;
}
main{
       max-width:960px;
       margin:0 auto;
       padding: 1em;
}
h2{
       color:white;
}
h3{
       background-color: aliceblue;
}
footer{
       background-color: #1e32a5;
       color: antiquewhite;
       text-align: center;
       padding:1em;
}
form {
       display: flex;
       flex-direction: column;
       align-items: center;
       margin-top: 20px;
```

```
}
label, input {
       margin: 10px 0;
}
button {
       margin-top: 20px;
       padding: 10px 20px;
       background-color: #4CAF50;
       color: rgb(29, 24, 24);
       border: none;
       border-radius: 5px;
       cursor: pointer;
}
#result {
       margin-top: 20px;
       text-align: center;
       font-weight: bold;
       font-size: 20px;
}
Script.js
function bookTickets() {
       var from = document.getElementById("from").value;
       var to = document.getElementById("to").value;
```

```
var date = document.getElementById("date").value;
       var seats = document.getElementById("seats").value;
if (from == "" || to == "" || date == "" || seats == "") {
       alert("Please fill in all fields.");
  return;
       }
       // Perform booking logic here...
}
Index.html
<!doctype html>
<html>
<head>
  <title>Simple Bus Seat Reservation Site</title>
  <link href='http://fonts.googleapis.com/css?family=Lato:400,700' rel='stylesheet'</pre>
type='text/css'>
  <link rel="stylesheet" type="text/css" href="css/jquery.seat-charts.css">
  k rel="stylesheet" type="text/css" href="css/style.css">
  <script src="https://code.jquery.com/jquery-3.6.0.min.js" integrity="sha256-</pre>
/xUj+3OJU5yExlq6GSYGSHk7tPXikynS7ogEvDej/m4=" crossorigin="anonymous"></script>
```

```
<script src="js/jquery.seat-charts.js"></script>
</head>
<body>
  <div class="wrapper">
    <div class="container">
      <div class="row">
        <div class="grid-50">
          <div id="seat-map">
            <div class="front-indicator">Bus Seat Reservation</div>
            <h4 class="text-muted fw-bold text-center" style="padding-left:3em;
margin:.5em">From Front Row</h4>
            <div id="bus-seat-map"></div>
            <h4 class="text-muted fw-bold text-center" style="padding-left:3em;
margin:.5em">End of Seat Row</h4>
          </div>
        </div>
        <div class="grid-50">
          <div class="booking-details">
            <form action="" method="post">
S
              <h2>Booking Details</h2>
              <h3> Selected Seats (<span id="counter">0</span>):</h3>
              ul id="selected-seats">
               <h2>Total: <b>$<span id="total"></span></b></h2>
```

```
<button type="button" id="checkout-button"> Book and pay</button>
          </form>
              </div>
            <div id="legend"></div>
            <button id="reset-btn" type="button">Reset Bus Seat</button>
          </div>
        </div>
      </div>
    </div>
  </div>
  <script src="./js/script1.js"></script>
</body>
</html>
Style.css
html,
body {
 height: 100%;
```

width: 100%;

```
}
body {
  font-family: cursive;
  max-height: 100%;
  overflow: auto;
  background-color: #ebf3f3;
  background-image: url("C:/Users/cherian/Desktop/bus/try.jpg");
  background-repeat: no-repeat;
  background-size: cover;
  background-position:center;
  color: hsl(0, 0%, 6%);
  overflow-x: hidden;
}
a {
  color: #b71a4c;
}
.front-indicator {
  margin: 0.5em 0;
  width: 100%;
  background-color: #f6f6f6;
  background-image: none;
  color: #ffffff;
  text-shadow: 2px 2px 5px #000;
```

```
font-size: 21px;
  font-weight: 700;
  padding: 1em 0;
  text-align: center;
  border-radius: 3em;
  background-color: #0093E9;
  background-image: linear-gradient(160deg, #0093E9 0%, #80D0C7 100%);
}
.wrapper {
  width: 100%;
 text-align: center;
}
.container {
  margin: 0 auto;
  width: 80%;
 text-align: left;
}
.booking-details {
  text-align: left;
  font-size: 12px;
  padding: 4.5em;
  margin-top: 4em;
}
```

```
.booking-details h2 {
  margin: 25px 0 20px 0;
  font-size: 17px;
}
.booking-details h3 {
  margin: 5px 5px 0 0;
  font-size: 14px;
}
div.seatCharts-cell {
  color: #1a1c1e;
  height: 4em;
  width: 14.666666%;
  line-height: .5em;
  display: flex;
  align-items: center;
  justify-content: center;
  font-size: 17px;
}
div.seatCharts-seat {
  color: #FFFFFF;
  cursor: pointer;
}
div.seatCharts-row {
```

```
height: 5em;
}
div.seatCharts-seat.available {
  background: rgb(103, 122, 136);
  background: radial-gradient(circle, #2a05ad 0%, rgb(76, 74, 187) 25%, rgba(76, 74, 187) 50%,
rgba(46, 135, 196, 1) 75%, rgba(40, 121, 177, 1) 100%);
}
div.seatCharts-seat.available.first-class {
  background: rgb(178, 64, 212);
  background: radial-gradient(circle, rgb(247, 105, 176) 0%,rgb(247, 105, 176)) 25%, rgba(118,
12, 149, 1) 50%, rgba(126, 17, 149, 1) 75%, rgba(94, 2, 121, 1) 100%;
}
div.seatCharts-seat.focused {
  background: rgb(219, 215, 215);
  background: radial-gradient(circle, rgba(219, 215, 215, 1) 0%, rgba(205, 205, 205, 1) 25%,
rgba(195, 192, 192, 1) 50%, rgba(204, 204, 204, 1) 75%, rgba(207, 207, 207, 1) 100%);
  color: #1a1c1e
}
div.seatCharts-seat.selected {
  background-color: hwb(123 31% 35%);
  background-image: linear-gradient(45deg, hwb(123 31% 35%) 0%, hwb(123 31% 35%) 100%);
  text-shadow: 2px 2px 5px #000;
}
```

```
div.seatCharts-seat.unavailable {
  background: rgb(252, 121, 121);
  background: radial-gradient(circle, rgba(252, 121, 121, 1) 0%, rgba(249, 81, 81, 1) 25%,
rgba(231, 53, 53, 1) 50%, rgba(255, 24, 24, 1) 75%, rgba(217, 6, 6, 1) 100%);
}
div.seatCharts-container {
  border-right: 1px dotted #adadad;
  padding: 20px;
}
div.seatCharts-legend {
  padding-left: 0px;
  bottom: 16px;
}
ul.seatCharts-legendList {
  padding-left: 0px;
}
span.seatCharts-legendDescription {
  margin-left: 5px;
  line-height: 30px;
}
.checkout-button {
  display: block;
```

```
margin: 10px 0;
  font-size: 14px;
}
#selected-seats {
  min-height: 10em;
  overflow-y: scroll;
  background: #fff;
  padding: 0.5em 1em;
  overflow: auto;
}
ul#selected-seats:empty:after {
  content: "Please select Seat/s first";
  color: #6c6c6c;
  font-style: italic;
}
ul#selected-seats>li {
  color: #000;
  list-style: none;
}
.text-muted {
  color: rgb(241, 239, 239);
  text-shadow: 2px 2px 5px #000;
}
```

```
.text-center {
  text-align: center;
  align-items: center;
  justify-content: center;
}
.fw-bold {
  font-weight: bold;
}
.fw-bolder {
  font-weight: bolder;
}
.row {
  --bs-gutter-x: 0.5rem;
  --bs-gutter-y: 0.5rem;
  display: flex;
  flex-wrap: wrap;
  margin-top: calc(-1 * var(--bs-gutter-y));
  margin-right: calc(-.5 * var(--bs-gutter-x));
  margin-left: calc(-.5 * var(--bs-gutter-x));
}
.grid-50 {
  flex: 0 0 auto;
  width: 50%;
```

```
}
div.seatCharts-space {
  background-color: transparent;
  color: #fff !important;
}
li.seatCharts-legendItem {
  margin-top: 10px;
  font-size: 15px;
  line-height: 5em;
}
#checkout-button {
  margin: 10px;
  padding: 15px 45px;
  text-align: center;
  text-transform: uppercase;
  transition: .5s;
  background-size: 200% auto;
  color: hsl(0, 11%, 95%);
  border-radius: 10px;
  display: block;
  background-image: linear-gradient(to right, #77A1D3 0%, #79CBCA 51%, #77A1D3 100%);
  border: none;
  cursor: pointer;
}
#checkout-button:hover,
#reset-btn:hover {
```

```
background-position: right center;
  color: #fff;
  text-decoration: none;
}
#reset-btn {
  width: 100%;
  margin: 10px;
  padding: 15px 45px;
  text-align: center;
  text-transform: uppercase;
  transition: .5s;
  background-size: 200% auto; div.seatCharts-container {
       /*min-width: 700px;*/
}
div.seatCharts-cell {
       height: 16px;
       width: 16px;
       margin: 3px;
       float: left;
       text-align: center;
       outline: none;
       font-size: 13px;
       line-height:16px;
       color: blue;
```

```
}
```

jquery.seat-charts.css

```
div.seatCharts-seat {
       background-color: green;
       color: white;
       -webkit-border-radius: 5px;
       -moz-border-radius: 5px;
       border-radius: 5px;
       cursor: default;
}
div.seatCharts-seat:focus {
       border: none;
}
/*
.seatCharts-seat:focus {
       outline: none;
}
*/
div.seatCharts-space {
       background-color: white;
}
div.seatCharts-row {
       height: 50px;
}
```

```
div.seatCharts-row:after {
       clear: both;
}
div.seatCharts-seat.selected {
       background-color: aqua;
}
div.seatCharts-seat.focused {
       background-color: #6db131;
}
div.seatCharts-seat.available {
       background-color: green;
}
div.seatCharts-seat.unavailable {
       background-color: red;
       cursor: not-allowed;
}
ul.seatCharts-legendList {
       list-style: none;
}
li.seatCharts-legendItem {
       margin-top: 10px;
       line-height: 2;
```

```
}
  color: #fff;
  border-radius: 5em;
  display: block;
  border: none;
  cursor: pointer;
  background-image: linear-gradient(to right, #06beb6 0%, #48b1bf 51%, #06beb6 100%);
}
Script1.js
var firstSeatLabel = 1;
var booked = !!localStorage.getItem('booked') ? $.parseJSON(localStorage.getItem('booked')) :
[];
$(document).ready(function() {
  var $cart = $('#selected-seats'),
    $counter = $('#counter'),
    $total = $('#total'),
    sc = $('#bus-seat-map').seatCharts({
       map: [
         'ff ff',
         'ff ff',
         'ee ee',
         'ee_ee',
         'ee___',
         'ee ee',
         'ee_ee',
         'ee_ee',
         'eeeee',
```

```
],
seats: {
  f: {
    price: 75,
    classes: 'first-class', //your custom CSS class
    category: 'First Class'
  },
  e: {
    price: 50,
    classes: 'economy-class', //your custom CSS class
    category: 'Economy Class'
  }
},
naming: {
  top: false,
  getLabel: function(character, row, column) {
    return firstSeatLabel++;
  },
},
legend: {
  node: $('#legend'),
  items: [
    ['f', 'available', 'First Class'],
    ['e', 'available', 'Economy Class'],
    ['f', 'unavailable', 'Already Booked']
  ]
```

```
},
       click: function() {
         if (this.status() == 'available') {
           //let's create a new  which we'll add to the cart items
           $('' + this.data().category + 'Seat # ' + this.settings.label + ': <b>$' +
this.data().price + '</b> <a href="#" class="cancel-cart-item">[cancel]</a>')
              .attr('id', 'cart-item-' + this.settings.id)
              .data('seatId', this.settings.id)
              .appendTo($cart);
           /*
            * Lets update the counter and total
            * .find function will not find the current seat, because it will change its stauts only
after return
            * 'selected'. This is why we have to add 1 to the length and the current seat price to
the total.
            */
           $counter.text(sc.find('selected').length + 1);
           $total.text(recalculateTotal(sc) + this.data().price);
           return 'selected';
         } else if (this.status() == 'selected') {
           //update the counter
           $counter.text(sc.find('selected').length - 1);
```

```
//and total
            $total.text(recalculateTotal(sc) - this.data().price);
           //remove the item from our cart
            $('#cart-item-' + this.settings.id).remove();
           //seat has been vacated
            return 'available';
         } else if (this.status() == 'unavailable') {
           //seat has been already booked
            return 'unavailable';
         } else {
            return this.style();
         }
       }
    });
  //this will handle "[cancel]" link clicks
  $('#selected-seats').on('click', '.cancel-cart-item', function() {
    //let's just trigger Click event on the appropriate seat, so we don't have to repeat the logic
here
    sc.get($(this).parents('li:first').data('seatId')).click();
  });
  //let's pretend some seats have already been booked
  // sc.get(['1_2', '4_1', '7_1', '7_2']).status('unavailable');
```

```
sc.get(booked).status('unavailable');
});
function recalculateTotal(sc) {
  var total = 0;
  //basically find every selected seat and sum its price
  sc.find('selected').each(function() {
    total += this.data().price;
  });
  return total;
}
$(function() {
  $('#checkout-button').click(function() {
    var items = $('#selected-seats li')
    if (items.length <= 0) {
       alert("Please select atleast 1 seat first.")
       return false;
    }
    var selected = [];
    items.each(function(e) {
       var id = $(this).attr('id')
```

```
id = id.replace("cart-item-", "")
      selected.push(id)
    })
    if (Object.keys(booked).length > 0) {
      Object.keys(booked).map(k => {
        selected.push(booked[k])
      })
    }
    localStorage.setItem('booked', JSON.stringify(selected))
    alert("tickets has been booked successfully.")
    location.reload()
  })
  $('#reset-btn').click(function() {
    if (confirm("are you sure to reset the reservation of the bus?") === true) {
      localStorage.removeItem('booked')
      alert("Seats has been Reset successfully.")
      location.reload()
    }
  })
})
Jquery-seats-charts.js
(function($) {
       //'use strict';
```

```
$.fn.seatCharts = function (setup) {
       //if there's seatCharts object associated with the current element, return it
       if (this.data('seatCharts')) {
              return this.data('seatCharts');
       }
       var fn = this,
              seats = {},
              seatIds = [],
               legend,
              settings = {
                      animate: false, //requires jQuery UI
                      naming : {
                             top: true,
                             left: true,
                             getId : function(character, row, column) {
                                     return row + '_' + column;
                             },
                             getLabel : function (character, row, column) {
                                     return column;
                             }
                      },
                      legend : {
                             node : null,
                             items:[]
```

```
if (this.status() == 'available') {
                        return 'selected';
                } else if (this.status() == 'selected') {
                        return 'available';
                } else {
                        return this.style();
                }
        },
        focus : function() {
                if (this.status() == 'available') {
                        return 'focused';
                } else {
                        return this.style();
                }
        },
        blur : function() {
                return this.status();
        },
        seats : {}
},
//seat will be basically a seat object which we'll when generating the map
```

},

click : function() {

```
seat = (function(seatCharts, seatChartsSettings) {
                              return function (setup) {
                                      var fn = this;
                                      fn.settings = $.extend({
                                             status: 'available', //available, unavailable,
selected
                                             style: 'available',
                                             //make sure there's an empty hash if user doesn't
pass anything
                                             data : seatChartsSettings.seats[setup.character]
|| {}
                                             //anything goes here?
                                      }, setup);
                                      fn.settings.$node = $('<div></div>');
                                      fn.settings.$node
                                             .attr({
                                                     id
                                                              : fn.settings.id,
                                                     role
                                                               : 'checkbox',
                                                     'aria-checked' : false,
                                                     focusable : true,
                                                     tabIndex : -1 //manual focus
                                             })
                                             .text(fn.settings.label)
                                             .addClass(['seatCharts-seat', 'seatCharts-cell',
'available'].concat(
```

```
//let's merge custom user defined classes
with standard JSC ones
                                                     fn.settings.classes,
                                                     typeof
seatChartsSettings.seats[fn.settings.character] == "undefined" ?
                                                            []:
seatChartsSettings.seats[fn.settings.character].classes
                                                    ).join(' '));
                                     //basically a wrapper function
                                     fn.data = function() {
                                             return fn.settings.data;
                                     };
                                     fn.char = function() {
                                             return fn.settings.character;
                                     };
                                     fn.node = function() {
                                             return fn.settings.$node;
                                     };
                                      * Can either set or return status depending on arguments.
                                      * If there's no argument, it will return the current style.
```

```
* If you pass an argument, it will update seat's style
                                      */
                                     fn.style = function() {
                                             return arguments.length == 1?
                                                    (function(newStyle) {
                                                            var oldStyle = fn.settings.style;
                                                            //if nothing changes, do nothing
                                                            if (newStyle == oldStyle) {
                                                                   return oldStyle;
                                                            }
                                                            //focused is a special style which is
not associated with status
                                                            fn.settings.status = newStyle !=
'focused' ? newStyle : fn.settings.status;
                                                            fn.settings.$node
                                                                    .attr('aria-checked', newStyle
== 'selected');
                                                            //if user wants to animate status
changes, let him do this
                                                            seatChartsSettings.animate?
       fn.settings.$node.switchClass(oldStyle, newStyle, 200):
       fn.settings.$node.removeClass(oldStyle).addClass(newStyle);
```

```
return fn.settings.style = newStyle;
                                                      })(arguments[0]) : fn.settings.style;
                                      };
                                      //either set or retrieve
                                      fn.status = function() {
                                              return fn.settings.status = arguments.length == 1?
                                                     fn.style(arguments[0]) : fn.settings.status;
                                      };
                                      //using immediate function to convienietly get shortcut
variables
                                      (function(seatSettings, character, seat) {
                                              //attach event handlers
                                              $.each(['click', 'focus', 'blur'], function(index,
callback) {
                                                     //we want to be able to call the functions
for each seat object
                                                     fn[callback] = function() {
                                                             if (callback == 'focus') {
                                                                     //if there's already a focused
element, we have to remove focus from it first
                                                                     if (seatCharts.attr('aria-
activedescendant') !== undefined) {
       seats[seatCharts.attr('aria-activedescendant')].blur();
                                                                     }
```

```
seatCharts.attr('aria-
activedescendant', seat.settings.id);
                                                                     seat.node().focus();
                                                             }
                                                             /*
                                                              * User can pass his own callback
function, so we have to first check if it exists
                                                              * and if not, use our default
callback.
                                                              * Each callback function is executed
in the current seat context.
                                                              */
                                                             return fn.style(typeof
seatSettings[character][callback] === 'function' ?
       seatSettings[character][callback].apply(seat) : seatChartsSettings[callback].apply(seat));
                                                     };
                                              });
                                      //the below will become seatSettings, character, seat
thanks to the immediate function
                                      })(seatChartsSettings.seats, fn.settings.character, fn);
                                      fn.node()
                                             //the first three mouse events are simple
                                              .on('click',
                                                           fn.click)
                                              .on('mouseenter', fn.focus)
```

```
.on('mouseleave', fn.blur)
                                            //keydown requires quite a lot of logic, because we
have to know where to move the focus
                                            .on('keydown', (function(seat, $seat) {
                                                   return function (e) {
                                                          var $newSeat;
                                                          //everything depends on the
pressed key
                                                          switch (e.which) {
                                                                 //spacebar will just trigger
the same event mouse click does
                                                                 case 32:
                                                                         e.preventDefault();
                                                                         seat.click();
                                                                         break;
                                                                 //UP & DOWN
                                                                 case 40:
                                                                 case 38:
                                                                         e.preventDefault();
                                                                         * This is a recursive,
immediate function which searches for the first "focusable" row.
```

```
* We're using
immediate function because we want a convenient access to some DOM elements
                                                                        * We're using
recursion because sometimes we may hit an empty space rather than a seat.
                                                                        */
                                                                        $newSeat = (function
findAvailable($rows, $seats, $currentRow) {
                                                                               var $newRow;
                                                                              //let's
determine which row should we move to
                                                                              if
(!$rows.index($currentRow) && e.which == 38) {
                                                                                      //if
this is the first row and user has pressed up arrow, move to the last row
       $newRow = $rows.last();
                                                                              } else if
($rows.index($currentRow) == $rows.length-1 && e.which == 40) {
                                                                                      //if
this is the last row and user has pressed down arrow, move to the first row
       $newRow = $rows.first();
                                                                               } else {
                                                                                      //using
eq to get an element at the desired index position
       $newRow = $rows.eq(
```

```
//if up arrow, then decrement the index, if down increment it
       $rows.index($currentRow) + (e.which == 38 ? (-1) : (+1))
                                                                                        );
                                                                                 }
                                                                                 //now that we
know the row, let's get the seat using the current column position
                                                                                 $newSeat =
$newRow.find('.seatCharts-seat,.seatCharts-space').eq($seats.index($seat));
                                                                                 //if the seat
we found is a space, keep looking further
                                                                                 return
$newSeat.hasClass('seatCharts-space') ?
       findAvailable($rows, $seats, $newRow) : $newSeat;
                                                                         })($seat
                                                                                 //get a
reference to the parent container and then select all rows but the header
       .parents('.seatCharts-container')
       .find('.seatCharts-row:not(.seatCharts-header)'),
                                                                                 $seat
                                                                                 //get a
reference to the parent row and then find all seat cells (both seats & spaces)
```

```
.parents('.seatCharts-row:first')
       .find('.seatCharts-seat,.seatCharts-space'),
                                                                                 //get a
reference to the current row
       $seat.parents('.seatCharts-row:not(.seatCharts-header)')
                                                                          );
                                                                          //we couldn't
determine the new seat, so we better give up
                                                                          if (!$newSeat.length)
{
                                                                                 return;
                                                                          }
                                                                          //remove focus from
the old seat and put it on the new one
                                                                          seat.blur();
       seats[$newSeat.attr('id')].focus();
                                                                          $newSeat.focus();
                                                                          //update our "aria"
reference with the new seat id
                                                                          seatCharts.attr('aria-
activedescendant', $newSeat.attr('id'));
```

```
break;
                                                                   //LEFT & RIGHT
                                                                   case 37:
                                                                   case 39:
                                                                          e.preventDefault();
                                                                          /*
                                                                           * The logic here is
slightly different from the one for up/down arrows.
                                                                           * User will be able to
browse the whole map using just left/right arrow, because
                                                                           * it will move to the
next row when we reach the right/left-most seat.
                                                                           */
                                                                          $newSeat =
(function($seats) {
                                                                                  if
(!$seats.index($seat) && e.which == 37) {
                                                                                         //user
has pressed left arrow and we're currently on the left-most seat
                                                                                         return
$seats.last();
                                                                                  } else if
($seats.index($seat) == $seats.length -1 && e.which == 39) {
                                                                                         //user
has pressed right arrow and we're currently on the right-most seat
                                                                                         return
$seats.first();
                                                                                  } else {
```

```
//simply move one seat left or right depending on the key
                                                                                          return
$seats.eq($seats.index($seat) + (e.which == 37 ? (-1) : (+1)));
                                                                                   }
                                                                           })($seat
       .parents('.seatCharts-container:first')
       .find('.seatCharts-seat:not(.seatCharts-space)'));
                                                                           if (!$newSeat.length)
{
                                                                                   return;
                                                                           }
                                                                           //handle focus
                                                                           seat.blur();
       seats[$newSeat.attr('id')].focus();
                                                                           $newSeat.focus();
                                                                           //update our "aria"
reference with the new seat id
                                                                           seatCharts.attr('aria-
activedescendant', $newSeat.attr('id'));
                                                                           break;
                                                                    default:
                                                                           break;
```

```
}
                                     };
                              })(fn, fn.node()));
                              //.appendTo(seatCharts.find('.' + row));
              }
       })(fn, settings);
fn.addClass('seatCharts-container');
//true -> deep copy!
$.extend(true, settings, setup);
//Generate default row ids unless user passed his own
settings.naminsg.rows = settings.naming.rows || (function(length) {
       var rows = [];
       for (var i = 1; i <= length; i++) {
               rows.push(i);
       }
       return rows;
})(settings.map.length);
//Generate default column ids unless user passed his own
settings.naming.columns = settings.naming.columns || (function(length) {
       var columns = [];
```

```
for (var i = 1; i <= length; i++) {
              columns.push(i);
       }
       return columns;
})(settings.map[0].split(").length);
if (settings.naming.top) {
       var $headerRow = $('<div></div>')
               .addClass('seatCharts-row seatCharts-header');
       if (settings.naming.left) {
              $headerRow.append($('<div></div>').addClass('seatCharts-cell'));
       }
       $.each(settings.naming.columns, function(index, value) {
               $headerRow.append(
                      $('<div></div>')
                             .addClass('seatCharts-cell')
                             .text(value)
              );
       });
}
fn.append($headerRow);
//do this for each map row
```

```
var $row = $('<div></div>').addClass('seatCharts-row');
                      if (settings.naming.left) {
                              $row.append(
                                     $('<div></div>')
                                             .addClass('seatCharts-cell seatCharts-space')
                                             .text(settings.naming.rows[row])
                              );
                      }
                      /*
                       * Do this for each seat (letter)
                       * Now users will be able to pass custom ID and label which overwrite the
one that seat would be assigned by getId and
                       * getLabel
                       * New format is like this:
                       * a[ID,label]a[ID]aaaaa
                       * So you can overwrite the ID or label (or both) even for just one seat.
                       * Basically ID should be first, so if you want to overwrite just label write
it as follows:
                       * a[,LABEL]
                       * Allowed characters in IDs areL 0-9, a-z, A-Z, _
```

\$.each(settings.map, function(row, characters) {

```
*/
                      $.each(characters.match(/[a-z_]{1}(\[[0-9a-z_]{0,}(,[0-9a-z_]+)?\])?/gi),
function (column, characterParams) {
                                              = characterParams.match(/([a-z_]{1})(\[([0-9a-z_]
                             var matches
,]+)\])?/i),
                                    //no matter if user specifies [] params, the character
should be in the second element
                                    character
                                                  = matches[1],
                                    //check if user has passed some additional params to
override id or label
                                     params
                                                  = typeof matches[3] !== 'undefined' ?
matches[3].split(','):[],
                                    //id param should be first
                                                  = params.length ? params[0] : null,
                                     overrideId
                                    //label param should be second
                                    overrideLabel = params.length === 2 ? params[1] : null;
                             $row.append(character != ' '?
                                    //if the character is not an underscore (empty space)
                                     (function(naming) {
                                            //so users don't have to specify empty objects
                                            settings.seats[character] = character in
settings.seats? settings.seats[character]: {};
```

* Allowed characters in labels are: 0-9, a-z, A-Z, _, ' ' (space)

```
var id = overrideId ? overrideId :
naming.getId(character, naming.rows[row], naming.columns[column]);
                                            seats[id] = new seat({
                                                   id
                                                         : id,
                                                   label : overrideLabel ?
                                                           overrideLabel:
naming.getLabel(character, naming.rows[row], naming.columns[column]),
                                                   row
                                                           : row,
                                                   column: column,
                                                   character: character
                                            });
                                            seatIds.push(id);
                                            return seats[id].node();
                                    })(settings.naming) :
                                    //this is just an empty space ( )
                                    $('<div></div>').addClass('seatCharts-cell seatCharts-
space')
                             );
                      });
                      fn.append($row);
              });
              //if there're any legend items to be rendered
              settings.legend.items.length? (function(legend) {
```

```
//either use user-defined container or create our own and insert it right
after the seat chart div
                      var $container = (legend.node || $('<div></div').insertAfter(fn))</pre>
                             .addClass('seatCharts-legend');
                      var $ul = $('')
                             .addClass('seatCharts-legendList')
                             .appendTo($container);
                      $.each(legend.items, function(index, item) {
                             $ul.append(
                                     $('')
                                            .addClass('seatCharts-legendItem')
                                            .append(
                                                    $('<div></div>')
                                                           //merge user defined classes with
our standard ones
                                                           .addClass(['seatCharts-seat',
'seatCharts-cell', item[1]].concat(
                                                                   settings.classes,
                                                                  typeof settings.seats[item[0]]
== "undefined" ? [] : settings.seats[item[0]].classes).join(' ')
                                                           )
                                            )
                                            .append(
                                                    $('<span></span>')
                                                           .addClass('seatCharts-
legendDescription')
                                                           .text(item[2])
```

```
)
               );
       });
       return $container;
})(settings.legend) : null;
fn.attr({
        tabIndex: 0
});
//when container's focused, move focus to the first seat
fn.focus(function() {
       if (fn.attr('aria-activedescendant')) {
               seats[fn.attr('aria-activedescendant')].blur();
        }
       fn.find('.seatCharts-seat:not(.seatCharts-space):first').focus();
       seats[seatIds[0]].focus();
});
//public methods of seatCharts
fn.data('seatCharts', {
        seats : seats,
        seatIds: seatIds,
```

```
//set for one, set for many, get for one
                       status: function() {
                              var fn = this;
                              return arguments.length == 1 ? fn.seats[arguments[0]].status():
(function(seatsIds, newStatus) {
                                      return typeof seatsIds == 'string'?
fn.seats[seatsIds].status(newStatus) : (function() {
                                              $.each(seatsIds, function(index, seatId) {
                                                      fn.seats[seatId].status(newStatus);
                                              });
                                      })();
                               })(arguments[0], arguments[1]);
                       },
                       each : function(callback) {
                              var fn = this;
                              for (var seatId in fn.seats) {
                                      if (false === callback.call(fn.seats[seatId], seatId)) {
                                              return seatId;//return last checked
                                      }
                              }
                              return true;
                       },
                       node
                                : function() {
                              var fn = this;
```

```
return $('#' + fn.seatIds.join(',#'));
                       },
                       find
                               : function(query) {//D, a.available, unavailable
                               var fn = this;
                               var seatSet = fn.set();
                               //user searches just for a particual character
                               return query.length == 1 ? (function(character) {
                                       fn.each(function() {
                                               if (this.char() == character) {
                                                       seatSet.push(this.settings.id, this);
                                               }
                                       });
                                       return seatSet;
                               })(query) : (function() {
                                       //user runs a more sophisticated query, so let's see if
there's a dot
                                       return query.indexOf('.') > -1 ? (function() {
                                               //there's a dot which separates character and the
status
                                               var parts = query.split('.');
                                               fn.each(function(seatId) {
```

//basically create a CSS query to get all seats by their DOM ids

```
if (this.char() == parts[0] && this.status() ==
parts[1]) {
                                                              seatSet.push(this.settings.id, this);
                                                      }
                                              });
                                               return seatSet;
                                       })(): (function() {
                                              fn.each(function() {
                                                      if (this.status() == query) {
                                                              seatSet.push(this.settings.id, this);
                                                      }
                                               });
                                               return seatSet;
                                       })();
                               })();
                       },
                               : function set() {//inherits some methods
                       set
                               var fn = this;
                               return {
                                       seats
                                               : [],
                                       seatIds : [],
                                       length: 0,
```

```
status : function() {
                                               var args = arguments,
                                                      that = this;
                                               //if there's just one seat in the set and user didn't
pass any params, return current status
                                               return this.length == 1 && args.length == 0?
this.seats[0].status(): (function() {
                                                      //otherwise call status function for each of
the seats in the set
                                                       $.each(that.seats, function() {
                                                              this.status.apply(this, args);
                                                      });
                                              })();
                                       },
                                       node
                                                : function() {
                                               return fn.node.call(this);
                                       },
                                                : function() {
                                       each
                                               return fn.each.call(this, arguments[0]);
                                      },
                                       get
                                               : function() {
                                               return fn.get.call(this, arguments[0]);
                                      },
                                       find
                                               : function() {
                                               return fn.find.call(this, arguments[0]);
                                       },
                                       set
                                              : function() {
                                               return set.call(fn);
```

```
},
                                       push
                                                : function(id, seat) {
                                               this.seats.push(seat);
                                               this.seatIds.push(id);
                                               ++this.length;
                                       }
                               };
                       },
                       //get one object or a set of objects
                       get : function(seatsIds) {
                               var fn = this;
                               return typeof seatsIds == 'string'?
                                       fn.seats[seatsIds] : (function() {
                                               var seatSet = fn.set();
                                               $.each(seatsIds, function(index, seatId) {
                                                       if (typeof fn.seats[seatId] === 'object') {
                                                              seatSet.push(seatId,
fn.seats[seatId]);
                                                       }
                                               });
                                               return seatSet;
                                       })();
                       }
```

```
});
return fn.data('seatCharts');
}
```







