

ASSIGNMENT 9: JSON SETLIST

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URL: <https://sejaldua.com/web-programming/hw9>

Specification

Task: Your assignment is to create a JSON to represent a set list for a cover band.

PART 1: Create a JSON (as an array in Javascript)

Each entry should have space to describe the artist(s), title, music genre(s), and year the song was released.

PART 2: Serialize and Display

PART 3: User-Friendly Display

PART 4: Filter the Data

Include a form that allows the user to pick a genre. The form should have a drop down box (<select>) listing the possible genres plus a button labeled "Filter". You must list only genres that are in the set list. When the user clicks the button, display only song titles from the selected genre in a user friendly format.

Listing 1: HTML and Javascript code for JSON Setlist

```
1 <html>
2 <head>
3   <meta name="viewport" content="width=device-width, initial-scale↵
      =1.0">
4   <link href="style.css" rel="stylesheet">
5   <title>Assignment 9</title>
6 </head>
7
8 <body>
9   <script language="javascript">
```

```
1 document.addEventListener("DOMContentLoaded", () => {
2     // PART 1: CREATE A JSON
3     let setlist = [
4         {
5             "title": "Till the World Ends",
6             "artist": "Britney Spears",
7             "genre": "Pop",
8             "year": "2011"
9         },
10        {
11            "title": "Spiraling Down",
12            "artist": "Maty Noyes",
13            "genre": "Pop",
14            "year": "2018"
15        },
16        {
17            "title": "In My Room",
18            "artist": "Frank Ocean",
19            "genre": "Hip Hop",
20            "year": "2019"
21        },
22        {
23            "title": "SICKO MODE",
24            "artist": "Travis Scott",
25            "genre": "Hip Hop",
26            "year": "2018"
27        },
28        {
29            "title": "Bags",
30            "artist": "Clairo",
31            "genre": "Pop",
32            "year": "2019"
33        },
34        {
35            "title": "Don't Stand So Close To Me",
36            "artist": "The Police",
37            "genre": "Rock",
38            "year": "1980"
39        },
40        {
41            "title": "So Sick",
42            "artist": "Ne-Yo",
43            "genre": "Hip Hop",
44            "year": "2005"
45        },
46        {
```

```

47         "title": "Mask Off",
48         "artist": "Future",
49         "genre": "Hip Hop",
50         "year": "2018"
51     },
52     {
53         "title": "Oceans Away",
54         "artist": "A R I Z O N A",
55         "genre": "Electronic",
56         "year": "2018"
57     },
58     {
59         "title": "Where I Wanna Be",
60         "artist": "A R I Z O N A",
61         "genre": "Electronic",
62         "year": "2018"
63     },
64     {
65         "title": "Supalonely",
66         "artist": "BENEE, Gus Dapperton",
67         "genre": "Alternative",
68         "year": "2020"
69     },
70     {
71         "title": "We Are Here",
72         "artist": "Alicia Keys",
73         "genre": "Soul",
74         "year": "2014"
75     },
76     {
77         "title": "Distance",
78         "artist": "Emily King",
79         "genre": "Soul",
80         "year": "2015"
81     },
82     {
83         "title": "Run",
84         "artist": "Collective Soul",
85         "genre": "Rock",
86         "year": "1999"
87     },
88     {
89         "title": "Kiss Me Thru The Phone",
90         "artist": "Soulja Boy, Sammie",
91         "genre": "Hip Hop",
92         "year": "2008"
93     },

```

```

94      {
95          "title": "Evacuate the Dancefloor",
96          "artist": "Cascada",
97          "genre": "Hip Hop",
98          "year": "2009"
99      },
100     {
101         "title": "Alive",
102         "artist": "Empire of the Sun",
103         "genre": "Electronic",
104         "year": "2013"
105     },
106     {
107         "title": "Don't Move",
108         "artist": "Phantogram",
109         "genre": "Electronic",
110         "year": "2011"
111     },
112     {
113         "title": "Freaking Out",
114         "artist": "A R I Z O N A",
115         "genre": "Electronic",
116         "year": "2019"
117     },
118     {
119         "title": "Recover",
120         "artist": "CHVRCHES",
121         "genre": "Electronic",
122         "year": "2013"
123     },
124     {
125         "title": "If I Ever Feel Better",
126         "artist": "Phoenix",
127         "genre": "Electronic",
128         "year": "2000"
129     },
130     {
131         "title": "I Wanna Get Better",
132         "artist": "Bleachers",
133         "genre": "2014",
134         "year": "Rock"
135     },
136     {
137         "title": "Cough Syrup",
138         "artist": "Young the Giant",
139         "genre": "Alternative",
140         "year": "2010"

```

```

141     },
142     {
143         "title": "Drive and Disconnect",
144         "artist": "Nao",
145         "genre": "Soul",
146         "year": "2018"
147     },
148     {
149         "title": "Hide and Seek",
150         "artist": "Imogen Heap",
151         "genre": "Electronic",
152         "year": "2005"
153     },
154     {
155         "title": "Hometown Girl",
156         "artist": "ZHU",
157         "genre": "Electronic",
158         "year": "2016"
159     },
160     {
161         "title": "Turn Me On",
162         "artist": "David Guetta (feat. Nicki Minaj)",
163         "genre": "Electronic",
164         "year": "2011"
165     },
166     {
167         "title": "The Way Life Goes",
168         "artist": "Lil Uzi Vert (feat. Oh Wonder)",
169         "genre": "Hip Hop",
170         "year": "2017"
171     },
172     {
173         "title": "WHAT TO DO?",
174         "artist": "Travis Scott (feat. Don Toliver)",
175         "genre": "Hip Hop",
176         "year": "2019"
177     },
178     {
179         "title": "Air I Breathe",
180         "artist": "Mat Kearney",
181         "genre": "Pop",
182         "year": "2015"
183     },
184     {
185         "title": "Cruise",
186         "artist": "Kygo, Andrew Jackson",
187         "genre": "Electronic",

```

```

188         "year": "2017"
189     },
190     {
191         "title": "Motion Sickness",
192         "artist": "Phoebe Bridgers",
193         "genre": "Alternative",
194         "year": "2017"
195     },
196     {
197         "title": "Feeling Lonely",
198         "artist": "boy pablo",
199         "genre": "Indie",
200         "year": "2018"
201     },
202     {
203         "title": "Can I Sit Next to You",
204         "artist": "Spoon",
205         "genre": "Alternative",
206         "year": "2017"
207     },
208     {
209         "title": "The Kids Aren't Alright",
210         "artist": "Fall Out Boy",
211         "genre": "Rock",
212         "year": "2015"
213     },
214     {
215         "title": "The Less I Know The Better",
216         "artist": "Tame Impala",
217         "genre": "Indie",
218         "year": "2015"
219     },
220     {
221         "title": "Hard Times",
222         "artist": "Paramore",
223         "genre": "Pop",
224         "year": "2017"
225     },
226     {
227         "title": "Idle Town",
228         "artist": "Conan Gray",
229         "genre": "Alternative",
230         "year": "2017"
231     },
232     {
233         "title": "Breathe Deeper",
234         "artist": "Tame Impala",

```

```

235         "genre": "Indie",
236         "year": "2020"
237     },
238     {
239         "title": "Are You Bored Yet?",
240         "artist": "Wallows, Clairo",
241         "genre": "Indie",
242         "year": "2019"
243     },
244     {
245         "title": "Lose My Breath",
246         "artist": "Destiny's Child",
247         "genre": "Hip Hop",
248         "year": "2004"
249     },
250     {
251         "title": "Coroner",
252         "artist": "Lando Chill",
253         "genre": "Hip Hop",
254         "year": "2016"
255     },
256     {
257         "title": "First Train Home",
258         "artist": "Imogen Heap",
259         "genre": "Electronic",
260         "year": "2008"
261     },
262     {
263         "title": "Airplanes",
264         "artist": "B.o.B, Hayley Williams",
265         "genre": "Hip Hop",
266         "year": "2010"
267     },
268     {
269         "title": "Hospital Beds",
270         "artist": "Cold War Kids",
271         "genre": "Alternative",
272         "year": "2006"
273     },
274     {
275         "title": "bodyache",
276         "artist": "Purity Ring",
277         "genre": "Electronic",
278         "year": "2015"
279     },
280     {
281         "title": "Abandon",

```

```

282         "artist": "Charles Fauna",
283         "genre": "Alternative",
284         "year": "2017"
285     },
286     {
287         "title": "Are You Feeling Sad?",
288         "artist": "Little Dragon",
289         "genre": "Electronic",
290         "year": "2020"
291     }
292 ];
293
294 // PART 2: SERIALIZE AND DISPLAY
295 for (i = 0; i < setlist.length; i++) {
296     serialized = JSON.stringify(setlist[i]);
297     document.getElementById("allData").innerHTML += serialized<←
        + "<br>";
298 }
299 var str_setlist = JSON.stringify(setlist);
300 var json_setlist = JSON.parse(str_setlist);
301
302 // PART 3: USER FRIENDLY DISPLAY
303 function displayColTitles() {
304     s = "<table class='table'>";
305     s += "<tr class='hrow'>";
306     s += "<th><b>TITLE</b></th>";
307     s += "<th><b>ARTIST</b></th>";
308     s += "<th><b>GENRE</b></th>";
309     s += "<th><b>YEAR</b></th>";
310     s += "</tr>";
311     return s;
312 }
313
314 function displaySong(x) {
315     s = "";
316     s += "<tr>";
317     s += "<th>" + json_setlist[x].title + "</th>";
318     s += "<th>" + json_setlist[x].artist + "</th>";
319     s += "<th>" + json_setlist[x].genre + "</th>";
320     s += "<th>" + json_setlist[x].year + "</th>";
321     s += "</tr>";
322     return s;
323 }
324
325 function displayAll() {
326     songs = displayColTitles();
327     for (x in json_setlist)

```



```

328         songs += displaySong(x);
329         document.getElementById("userFriendly").innerHTML = songs;
330     }
331     displayAll();
332
333     // PART 4: FILTER BY GENRE
334     document.querySelector("#filter").addEventListener("click", ←
        function() {
335         var selection = document.querySelector("#selection").value←
            ;
336         songs = displayColTitles();
337         if (selection == "All") {
338             for (x in json_setlist)
339                 songs += displaySong(x);
340         }
341         else {
342             for (x in json_setlist) {
343                 if (selection == json_setlist[x].genre) {
344                     songs += displaySong(x);
345                 }
346             }
347         }
348         document.getElementById("userFriendly").innerHTML = songs;
349     });
350
351     // DISPLAY ALL SONGS (RESET)
352     document.querySelector("#showAll").addEventListener("click", ←
        function() {displayAll();});
353 })

```

```

1 </script>
2 <heading> <h1 style="padding-top: 20px">QUARANTINE BOPS</h1> <h2>A ←
    Themed Playlist Inspired By COVID-19</h2></heading>
3 <div style="width:100%; align-items: center; justify-content: center; ←
    display: flex;">
4     <div class="first" style="align-self: flex-start; width: 45%; ←
        margin: 10px; padding: 10px; float: left">
5         <h2 style="font-family: 'Signika', sans-serif;">Serialized ←
            Data</h2>
6         <p id="allData"></p>
7     </div>
8     <div class="second" style="align-self: flex-start; width: 45%; ←
        margin: 10px; padding: 10px; float: right;">
9         <form id="form">
10             <h2>User-Friendly Filter</h2>

```

```
11         <select name="Genres" id="selection" style="margin-right: 12px;">
12             <option value="All">All Genres</option>
13             <option value="Pop">Pop</option>
14             <option value="Soul">Soul</option>
15             <option value="Hip Hop">Hip Hop</option>
16             <option value="Alternative">Alternative</option>
17             <option value="Indie">Indie</option>
18             <option value="Electronic">Electronic</option>
19         </select>
20         <div class="button" id="filter">FILTER</div>
21         <div class="button" id="showAll">SHOW ALL</div>
22         <br><br>
23         <div id="userFriendly"></div>
24     </form>
25 </div>
26 </div>
27 </body>
28 </html>
```
