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## TP6 Assignment

Git url: <https://github.com/LyhongPich/TP-Internet-Programming/tree/TP6>

### **Ex1:** Pagination

Source code:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Ex1</title>
8
9      <style>
10         .content{
11             display: flex;
12             width: 670px;
13             height: 500px;
14             margin: 0px auto;
15             background-color: aquamarine;
16         }
17         #scroll{
18             width: 500px;
19             height: 480px;
20             background-color: rgb(189, 195, 195);
21             overflow-y: auto;
22         }
23         #num{
24             width: 80px;
25             text-align: end;
26             font-size: 2rem;
27         }
28         .data{
29             width: 470px;
30             height: 100px;
```

```
30     height: 100px;
31     margin: 5px auto 0px;
32     padding: 5px 0px 0px 5px;
33     background-color: ■ white;
34 }
35 img{
36     padding-left: 4px;
37     width: 18px;
38     height: 13px;
39 }
40 #loadingImg{
41     width: 30px;
42     height: 30px;
43     margin: 5px auto;
44     border-radius: 50%;
45     border: 3px solid transparent;
46     border-top-color: ■ green;
47     animation: load 0.5s ease infinite;
48 }
49 @keyframes load {
50     0% {
51         transform: rotate(0turn);
52     }
53     100% {
54         transform: rotate(1turn);
55     }
56 }
57 </style>
58 </head>
59 <body>
```

```
60 <div class="content">
61   <div id="num">
62
63   </div>
64   <div id="scroll">
65     <div id="display"></div>
66     <div id="showLoader">
67       <div id="loadingImg"></div>
68     </div>
69   </div>
70 </div>
71
72 <script>
73   let pageNumber = 0;
74
75   let pageChange = document.getElementById('num');
76   let scrolEle = document.getElementById('scroll');
77
78   // Target id display
79   let display = document.getElementById('display');
80   // Target id showLoader
81   let load = document.getElementById('showLoader');
82
83   // By default the scroll bar is at the start position, so no loading yet
84   let loading = false;
85
86   // Hide loading animation
87   load.hidden = true;
88
89   // fetch data from api using pageNumber
```

```

90     function fetchAPI(pageNumber) {
91
92         fetch(`https://api.instantwebtools.net/v1/passenger?page=${pageNumber}&size=20`)
93         .then(async (res)=>{
94             // Hide loading animation after getting data
95             load.hidden = true;
96
97             // Change text of page number when fetching more data
98             pageChange.innerText = pageNumber;
99             let getData = await res.json();
100
101             // console.log(getData.data[0]);
102             for(let x=0; x<getData["data"].length; x++) {
103                 display.innerHTML += `
104                     <div class="data">
105                         <span>
106                             ✈️: ${getData["data"][x].airline[0].name} - ${getData["data"][x].airline[0].country}
107                         </span>
108                         <br>
109                         <span>😊: ${getData["data"][x].name}</span>
110                     </div>
111                 `;
112             }
113             // display.innerHTML = setContent;
114         });
115     }
116     function fetching() {
117         // Trigger when scroll bar in at an end content
118         loading = true;
119

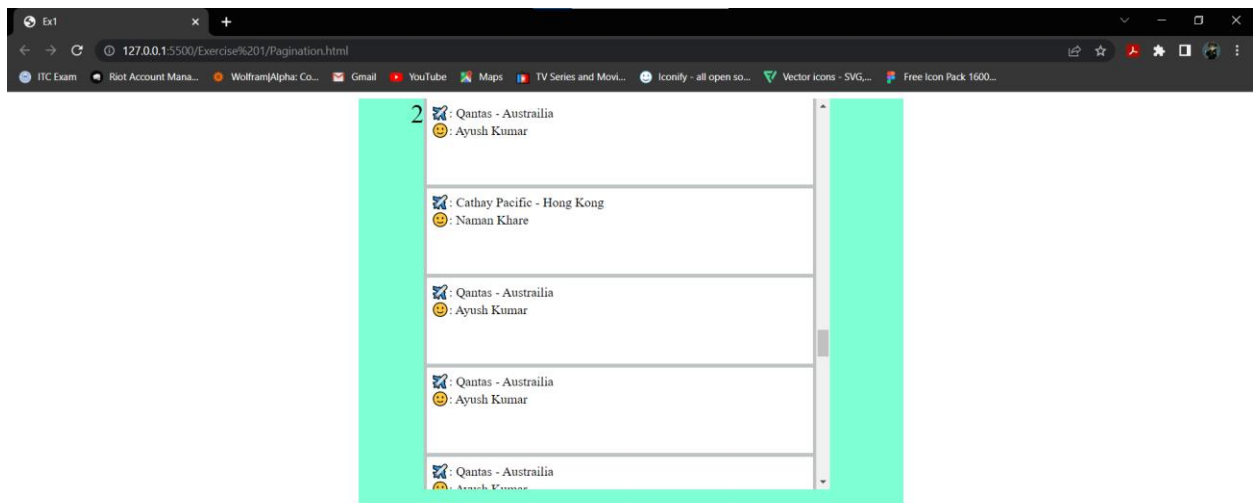
```

```

120         setTimeout(()=>{
121             // Before getting data loading animation is shown
122
123             load.hidden = false;
124             setTimeout(()=>{
125                 pageNumber++; // increase to next page for more data
126                 loading = false; // Get more data and disable loading display
127                 fetchAPI(pageNumber);
128             }, 1000);
129         }, 500); // Display loading animation for half second before showing data
130     }
131
132     fetchAPI(pageNumber);
133
134     scrolEle.addEventListener('scroll', (event)=>{
135         if(scrolEle.clientHeight + scrolEle.scrollTop >= (scrolEle.scrollHeight)) {
136             if(!loading) {
137                 // console.log(loading);
138                 fetching();
139                 // console.log(pageNumber);
140             }
141         }
142     });
143
144 </script>
145 </body>
146 </html>

```

**Output:**



## Ex2: Local data sync

### Source code:

```

1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5    <meta charset="UTF-8">
6    <meta http-equiv="X-UA-Compatible" content="IE=edge">
7    <meta name="viewport" content="width=device-width, initial-scale=1.0">
8    <title>Exercise 2</title>
9    <link href="https://kit-pro.fontawesome.com/releases/v5.15.4/css/pro.min.css" rel="stylesheet">
10   <style>
11     @import url('https://fonts.googleapis.com/css2?family=Lobster&family=Roboto+Condensed:wght@300&family=Roboto:wght@100&display=swap');
12     body {
13       margin: 0;
14       padding: 0;
15       background-color: #79, 244, 247;
16     }
17     .content {
18       height: 100vh;
19       display: flex;
20       justify-content: center;
21       margin: auto;
22       flex-direction: column;
23     }
24     .content>h3 {
25       width: 300px;
26       text-align: center;
27       padding: 10px;
28       box-shadow: #174, 173, 177, 0.8 0px 0px 0px 3px;
29       border-radius: 5px;
30       background-color: #aliceblue;

```

```
31     background-color: rgba(217, 210, 233, .8);
32     font-size: large;
33 }
34 .container {
35     display: flex;
36     width: 600px;
37     height: 500px;
38     margin: auto;
39     background-color: white;
40 }
41 #scroll {
42     overflow-y: auto;
43     width: 500px;
44     height: 100%;
45     background-color: rgb(189, 195, 195);
46 }
47 .num {
48     width: 50px;
49     text-align: end;
50     font-size: 2rem;
51 }
52 .data {
53     width: 470px;
54     height: 100px;
55     margin: 5px auto 0px;
56     padding: 5px 0px 0px 5px;
57     background-color: white;
58 }
59 @import url(https://fonts.googleapis.com/css?family=Roboto:100);
60 h1 {
```

```
61     font: 2em 'Roboto', sans-serif;
62     margin-bottom: 40px;
63 }
64 .loading {
65     display: flex;
66     justify-content: center;
67 }
68 .loader {
69     display: inline-block;
70     margin-top: 10px;
71     width: 50px;
72     height: 50px;
73     border: 3px solid rgba(255, 255, 255, .3);
74     border-radius: 50%;
75     border-top-color: rgb(30, 177, 60);
76     animation: spin 1s ease-in-out infinite;
77     -webkit-animation: spin 1s ease-in-out infinite;
78 }
79 @keyframes spin {
80     to {
81         -webkit-transform: rotate(360deg);
82     }
83 }
84 @-webkit-keyframes spin {
85     to {
86         -webkit-transform: rotate(360deg);
87     }
88 }
89 </style>
90 </head>
```

```

91 <body>
92   <div class="content">
93     <div class="container">
94       <div class="num">0</div>
95       <div id="scroll">
96       </div>
97     </div>
98   </div>
99   <div class="loading">
100     <div class="loader"></div>
101   </div>
102   <script>
103     let test = true;
104     let cur_page = 0;
105     let num_page = 0;
106     let outPut = '';
107     const loader = document.getElementsByClassName('loading');
108     const content = document.getElementsByClassName('content');
109     const scroller = document.getElementById('scroll');
110     let loadData = () => {
111       try {
112         if (localStorage.getItem('page0') && cur_page == 0) {
113           let data1 = [{}];
114
115           for (i = 0; i < localStorage.length; i++) {
116             data1[i] = JSON.parse(localStorage.getItem(`page${i}`));
117             for (j in data1[i]) {
118               outPut += `<div class="data">` +
119                 `<div>✂: ${data1[i][j].airline[0].name} - ${data1[i][j].airline[0].country}</div>` +
120                 `<div>😊: ${data1[i][j].name}</div>` +

```

```

121                 `</div>`
122               }
123             }
124             scroller.innerHTML = outPut;
125             loading(false);
126             cur_page = i;
127           } else if (cur_page >= 0) {
128             fetch(`https://api.instantwebtools.net/v1/passenger?page=${cur_page}&size=${10}`).then(async(arrData) => {
129               let results = await arrData.json();
130               let airline = '';
131               let data = [{}];
132               for (let result = 0; result < 10; result++) {
133                 airline = results.data[result].airline;
134                 const dataAdd = {
135                   name: `${results.data[result].name}`,
136                   airline: [{
137                     name: `${airline[0].name}`,
138                     country: `${airline[0].country}`
139                   }]
140                 };
141                 data[result] = dataAdd;
142                 outPut += `<div class="data">` +
143                   `<div>✂: ${airline[0].name} - ${airline[0].country}</div>` +
144                   `<div>😊: ${results.data[result].name}</div>` +
145                   `</div>`
146               }
147               console.log(data)
148               localStorage.setItem(`page${cur_page}`, JSON.stringify(data));
149               setTimeout(async() => {
150                 await loading(false);

```

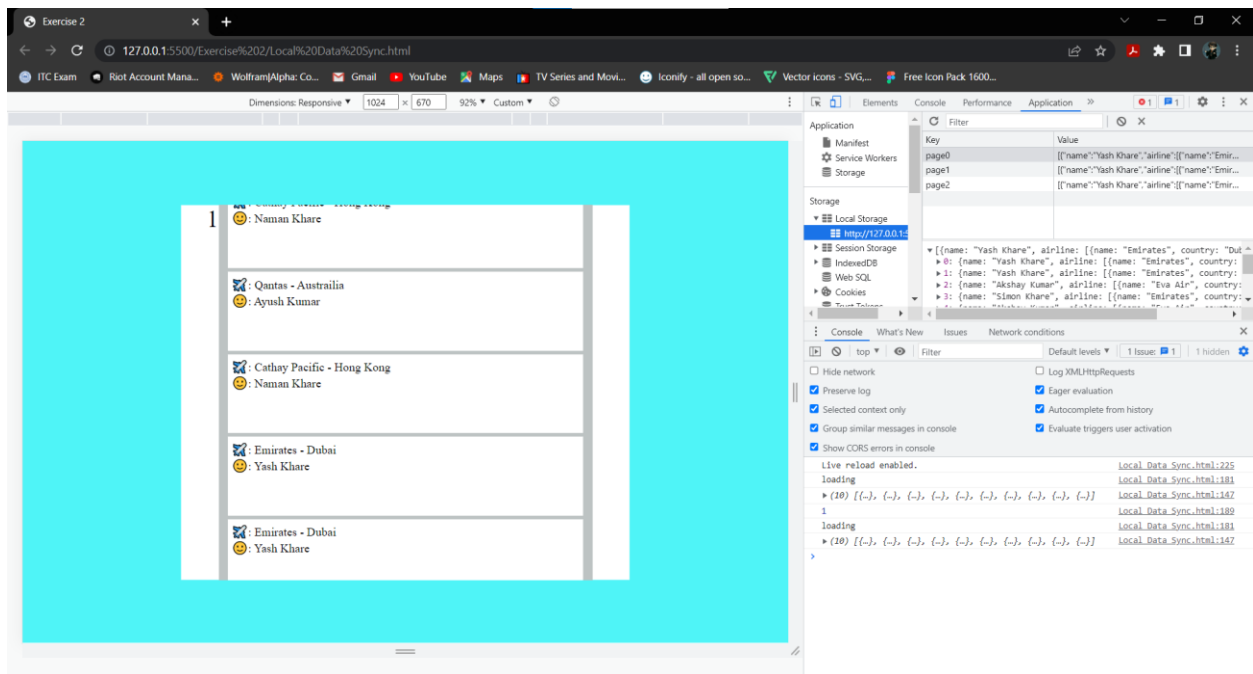


```

151         }, 2000);
152         scroller.innerHTML = outPut;
153         cur_page++;
154         test = true;
155     });
156     }
157     } catch (error) {
158         console.log(error);
159         cur_page--;
160     }
161 };
162 let loading = (load) => {
163     if (load == true) {
164         loader[0].style.display = 'flex';
165         content[0].style.display = 'none';
166     } else {
167         loader[0].style.display = 'none';
168         content[0].style.display = 'flex';
169     }
170 }
171 let pageNumber = (num) => {
172     document.getElementsByClassName('num')[0].innerHTML = num;
173 }
174 loading(true);
175 loadData();
176 scroller.addEventListener('scroll', () => {
177     const clientHeight = scroller.clientHeight;
178     const scollHeight = scroller.scrollHeight;
179     const scrollTop = scroller.scrollTop;
180     if (clientHeight + scrollTop + 200 >= scollHeight && test == true && cur_page <= 2862) {
181         console.log('loading')
182         localStorage.length = '';
183         loadData();
184         test = false;
185     }
186     if (clientHeight + scrollTop > (1030 * (num_page + 1)) + 600) {
187         num_page++;
188         pageNumber(num_page);
189         console.log(num_page)
190     } else if (clientHeight + scrollTop <= (1030 * (num_page) + 400)) {
191         num_page--;
192         pageNumber(num_page);
193         console.log(num_page)
194     }
195 })
196 </script>
197 </body>
198 </html>

```

**Output:**



### Ex3: List and Viewer

Source code:

```
1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5      <meta charset="UTF-8">
6      <meta http-equiv="X-UA-Compatible" content="IE=edge">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <link rel="preconnect" href="https://fonts.googleapis.com">
9      <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
10     <link href="https://fonts.googleapis.com/css2?family=Irish+Grover&display=swap" rel="stylesheet">
11     <title>Exercise 3</title>
12     <style>
13         *{
14             margin: 0px;
15         }
16         body{
17             display: flex;
18             justify-content: center;
19             margin: 100px;
20         }
21         #container{
22             width: 1000px;
23             height: 700px;
24             border: 5px solid black;
25             display: grid;
26             justify-content: center;
27         }
28         #container h1{
29             font-family: 'Irish Grover', cursive;
30             padding-top: 30px;
```

```
31         text-align: center;
32     }
33     #block{
34         display: flex;
35         justify-content: center;
36     }
37     #block_list{
38         font-family: Arial, Helvetica, sans-serif;
39         width: 400px;
40         height: 500px;
41         background-color: #f4f4f4;
42         margin: 5px;
43         border-radius: 10px;
44         overflow-y: auto;
45     }
46     #block_display{
47         font-family: Arial, Helvetica, sans-serif;
48         border: 2px solid #f4f4f4;
49         width: 400px;
50         height: 500px;
51         background-color: white;
52         margin: 5px;
53         border-radius: 10px;
54         overflow-y: auto;
55     }
56     #loading{
57         margin-top: 250px;
58         width: 50%;
59         height: 100px;
60     }
```

```
61     .box_list{
62         display: flex;
63         margin-top: 5px;
64         margin-left: 10px;
65         width: 95%;
66         height: 100px;
67         background-color: white;
68         border-radius: 5px;
69     }
70     .image_list{
71         font-size: 40px;
72     }
73     .box_list:hover{
74         background-color: rgb(64, 105, 210);
75     }
76     .text1{
77         margin-top: 10px;
78     }
79     .text2{
80         margin-top: 10px;
81     }
82     .block_display_beer{
83         display: grid;
84         justify-content: center;
85     }
86     .image_beer{
87         display: flex;
88         justify-content: center;
89     }
90     .beer{
```

```
91         width: 200px;
92         height: 400px;
93         margin-top: 20px;
94     }
95     .description{
96         text-align: center;
97     }
98     .name{
99         margin-top: 10px;
100    }
101    .time{
102        margin-top: 10px;
103    }
104    .contribution{
105        margin-top: 10px;
106    }
107    .bulider{
108        font-weight: bold;
109    }
110    </style>
111    </head>
112    <body>
113        <div id="container">
114            <div><h1>Find your Favorite 🍷?</h1></div>
115            <div id="block">
116                <div id="block_list"></div>
117                <div id="block_display"></div>
118            </div>
119        </div>
120        <script>
```

```

121     let list_data = document.getElementById("block_list");
122     let dataLoading = false;
123     let page=0;
124     let size=10;
125     let check=1;
126     let tmp="";
127     let parseddata="";
128     function click_display(){
129         let tmp1="";
130         for(let i=0,len=list_data.children.length;i<len;i++){
131             (function(index){
132                 list_data.children[i].onclick=function(){
133                     tmp1=`
134                     <div class="block_display_beer">
135                         <div class="image_beer"></img></div>
136                         <div class="description">
137                             <h3 class="name">${parseddata[index].name}</h3>
138                             <p class="time">${parseddata[index].first_brewed}</p>
139                             <p class="des">${parseddata[index].description}</p>
140                             <p class="contribution">Contribution</p>
141                             <p class="bulider"> ( ${parseddata[index].contributed_by} )</p>
142                         </div>
143                     </div>`
144                     document.getElementById("block_display").innerHTML=tmp1;
145                 }
146             })(i)
147         }
148     }
149     function display(){
150         let tmp="";

```

```

151         const str = localStorage.getItem('data');
152         parseddata = JSON.parse(str);
153         if(str!== null && check ==1){
154             console.log();
155             for(let i=0 ; i<parseddata.length;i++){
156                 tmp +=
157                 `<div class="box_list">
158                     <div class="image_list">🍺</div>
159                     <div>
160                         <p class="text1">${parseddata[i].name}</p>
161                         <p class="text2">${parseddata[i].description.substring(0, 30).concat('...')}</p>
162                     </div>
163                 </div>`
164             }
165             list_data.innerHTML=tmp;
166             number_page=parseddata.length/10;
167             page=parseddata.length;
168             size=page+10;
169         }
170         if(size<81){
171             fetch(`https://api.punkapi.com/v2/beers? page=${page}&per_page=${size}`).then(async (res) =>{
172                 let data_list = await res.json();
173                 const data_json = JSON.stringify(data_list);
174                 window.localStorage.setItem('data', data_json);
175                 for(let i=page ; i<data_list.length;i++){
176                     tmp +=
177                     `<div class="box_list">
178                         <div>🍺</div>
179                         <div class="list_each_data">
180                             <p class="text1">${data_list[i].name}</p>

```

```

181         <p class="text2">${data_list[i].description.substring(0, 30).concat('...')}</p>
182     </div>
183 </div> `
184     }
185     document.getElementById("block_list").innerHTML=tmp;
186     click_display()
187 }
188 }
189 }
190 list_data.addEventListener("scroll", (event) => {
191     const { scrollTop, clientHeight, scrollHeight } = list_data;
192     if ((clientHeight + scrollTop) >= scrollHeight*0.98) {
193         if (!dataLoading) {
194             size = page +10;
195             display()
196         }
197     }
198 });
199 display()
200 click_display()
201 </script>
202 </body>
203 </html>

```

## Output:

