

Name: Rotha Daprvavith

ID: e20190915

Group: I4 GIC(C)

TP06 JavaScript (Pagination, Local data sync)

GitHub repository: https://github.com/Daprvavith/TP_Internet_Programming/tree/TP06

Exercise01 : Pagination (infinie scroll)

`https://api.instantwebtools.net/v1/passenger`

?page=\${page}&size=\${limit}`

Build a scrollable content with a pagination API for infinite scroll.

- index.html

```
Exercise01 > index.html > html > body > div.wrapper > div.content-wrapper
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="stylesheet" href="./style.css">
9      <title>Ex01 Pagination Infinite Scroll</title>
10 </head>
11 <body>
12     <div class="wrapper">
13         <div id="page-Number">0</div>
14         <div class="content-wrapper">
15             <div class="content">
16
17             </div>
18             <div id="loader"></div>
19     </div>
20 </div>
21
22     <script src="./pagination.js"></script>
23 </body>
24
25 </html>
```

- style.scss

Exercise01 > style.scss > #page-Number

```
1
2 * {
3     margin: 0;
4     padding: 0;
5     box-sizing: border-box;
6 }
7
8 .wrapper {
9     width: 800px;
10    height: 400px;
11    margin: auto;
12    margin-top: 4rem;
13    border: 4px solid black;
14
15
16    display: flex;
17    background-color: rgb(190, 182, 182);
18 }
19
20 #page-Number {
21     width: 5%;
22 }
23
24 .content-wrapper {
25     padding: 8px;
26     width: 95%;
27     overflow-y: auto;
28     overflow-x: hidden;
29     background-color: rgb(255, 255, 255);
30 }
31 }
32
33 .content {
34     width: 100%;
35     padding: 3px;
36     height: fit-content;
37     background-color: grey;
38 }
39
40 .content>* {
41     padding: 1px;
42     height: 6rem;
43     min-height: fit-content;
44     margin-top: 3px;
45     background-color: white;
46     border-radius: 4px;
47 }
48
49
50 .content p {
51     display: flex;
52     height: fit-content;
53     align-items: center;
54     margin: 0;
55 }
56
57
58 #loader {
59     margin: auto;
60
61     border: 16px solid #ffffff;
62     border-radius: 50%;
63     border-top: 16px solid hsl(30, 62%, 51%);
64     border-bottom: 16px solid hsl(44, 100%, 40%);
65     width: 100px;
66     height: 100px;
67     animation: spin 1500ms linear infinite;
68     display: flex;
69     justify-content: center;
70     align-items: center;
71     display: none;
72 }
```

```

73     @keyframes spin {
74         0% {
75             transform: rotate(0deg);
76         }
77         100% {
78             transform: rotate(360deg);
79         }
80     }
81
82
83     #page-Number{
84         background-color: white;
85         color: rgb(17, 196, 130);
86         font-size: 2.5rem;
87         display: flex;
88         justify-content: center;
89         font-weight: bold;
90     }

```

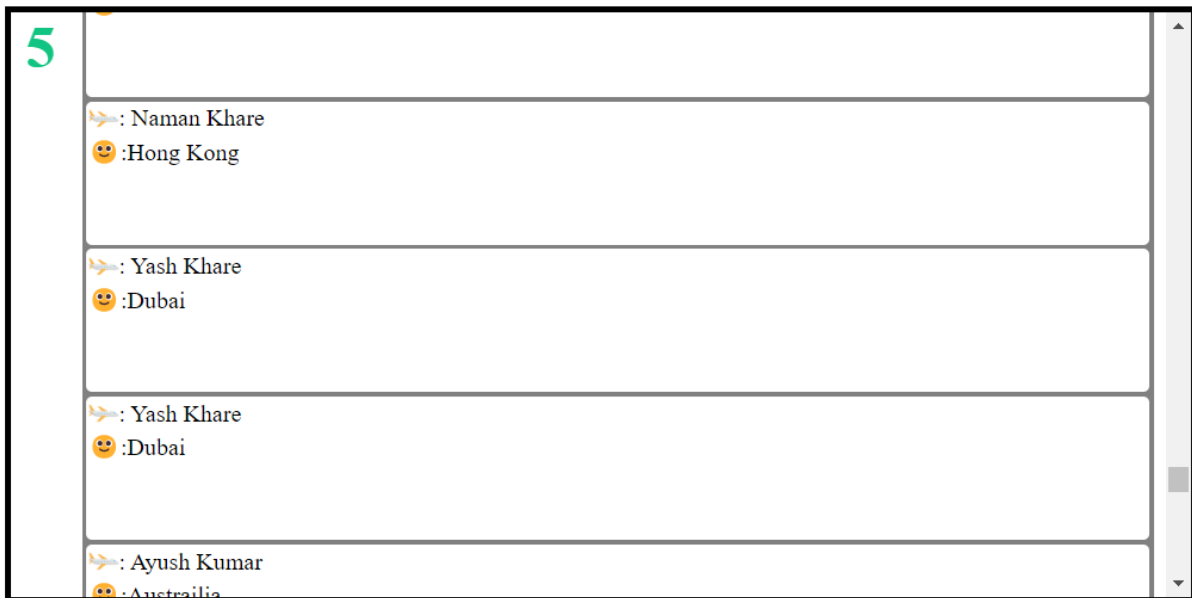
- pagination.js

```

Exercise01 > 0; pagination.js > ...
1  const contentWrapper = document.getElementsByClassName("content-wrapper")[0];
2  const content = document.getElementsByClassName("content")[0];
3  const pageNumber = document.getElementById("page-Number");
4
5  let pageNum = 0
6
7  let loading = false;
8  const loader=document.getElementById("loader");
9
10
11  function fetAPI() {
12      loader.style.display="flex"
13      return new Promise((resolve, reject) => {
14          loading=true;
15          fetch('https://api.instantwebtools.net/v1/passenger?page=${pageNum}&size=25').then(async (res) => {
16              const data = await res.json();
17              loading=false;
18              loader.style.display="none"
19              pageNumber.innerHTML=pageNum;
20              pageNum++;
21              resolve(data);
22          })
23      })
24  }
25
26  contentWrapper.addEventListener("scroll", () => {
27
28      if (contentWrapper.scrollTop + contentWrapper.clientHeight >= (contentWrapper.scrollHeight * 0.95)) {
29          if (!loading){
30              onFetch();
31          }
32      }
33  })
34  onFetch();
35
36  function onFetch() {
37      fetAPI().then((res) => {
38          const data = res.data
39          for (let c of data) {
40              content.innerHTML += `
41              <div>
42                  <p> ${c.name}</p>
43                  <p> :${c.airline[0].country}</p>
44              </div>
45              `
46          }
47      })
48  }

```

- Result for Ex01:



Ex02: Local data sync

Apply local storage for infinite scroll.

-index.html

```
Exercise02 > <> index.html > ...
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="stylesheet" href="./style.css">
9    <title>Exercise02 Local Data Sync</title>
10 </head>
11
12 <body>
13   <div class="wrapper">
14     <div id="page-Number">0</div>
15     <div class="content-wrapper">
16       <div class="content">
17
18       </div>
19       <div id="loader"></div>
20     </div>
21   </div>
22
23   <script src="./localdata.js"></script>
24 </body>
25 </html>
```

- style.scss

Exercise02 > style.scss > *

```
1
2  * {
3      margin: 0;
4      padding: 0;
5      box-sizing: border-box;
6  }
7
8  .wrapper {
9      width: 800px;
10     height: 400px;
11     margin: auto;
12     margin-top: 4rem;
13     border: 4px solid black;
14
15
16     display: flex;
17     background-color: rgb(190, 182, 182);
18 }
19
20 #page-Number {
21     width: 5%;
22 }
23
24 .content-wrapper {
25     padding: 8px;
26     width: 95%;
27     overflow-y: auto;
28     overflow-x: hidden;
29     background-color: rgb(255, 255, 255);
30 }
31
32
33 .content {
34     width: 100%;
35     padding: 3px;
36     height: fit-content;
37     background-color: grey;
38 }
39
40 .content>* {
41     padding: 1px;
42     height: 6rem;
43     min-height: fit-content;
44     margin-top: 3px;
45     background-color: white;
46     border-radius: 4px;
47 }
48
49
50 .content p {
51     display: flex;
52     height: fit-content;
53     align-items: center;
54     margin: 0;
55 }
56
57
58 #loader {
59     margin: auto;
60
61     border: 16px solid #ffffff;
62     border-radius: 50%;
63     border-top: 16px solid hsl(30, 62%, 51%);
64     border-bottom: 16px solid hsl(44, 100%, 40%);
65     width: 100px;
66     height: 100px;
67     animation: spin 1500ms linear infinite;
68     display: flex;
69     justify-content: center;
70     align-items: center;
71     display: none;
72 }
```

```

73   @keyframes spin {
74       0% {
75           transform: rotate(0deg);
76       }
77       100% {
78           transform: rotate(360deg);
79       }
80   }
81
82
83   #page-Number{
84       background-color: white;
85       color: rgb(17, 196, 130);
86       font-size: 2.5rem;
87       display: flex;
88       justify-content: center;
89       font-weight: bold;
90   }

```

- localdata.js

```

Exercise02 > 0: localdata.js > fetchData_LocalStorage
1   const contentWrapper = document.getElementsByClassName("content-wrapper")[0];
2   const content = document.getElementsByClassName("content")[0];
3   const pageNumber = document.getElementById("page-Number");
4
5   let pageNum = localStorage.getItem("pageNumber") == null ? 0 : localStorage.getItem("pageNumber");
6   pageNumber.innerHTML = pageNum;
7   let loading = false;
8   const loader = document.getElementById("loader");
9
10
11
12   function fetAPI() {
13       loader.style.display = "flex"
14       return new Promise((resolve, reject) => {
15           loading = true;
16           fetch("https://api.instantwebtools.net/v1/passenger?page=${pageNum}&size=25").then(async (res) => {
17               const data = await res.json();
18               loading = false;
19               loader.style.display = "none"
20               resolve(data);
21           })
22       })
23   }
24
25   contentWrapper.addEventListener("scroll", () => {
26       if (contentWrapper.scrollTop + contentWrapper.clientHeight >= (contentWrapper.scrollHeight * 0.95)) {
27           if (!loading) {
28               onFetch();
29           }
30       }
31   })
32

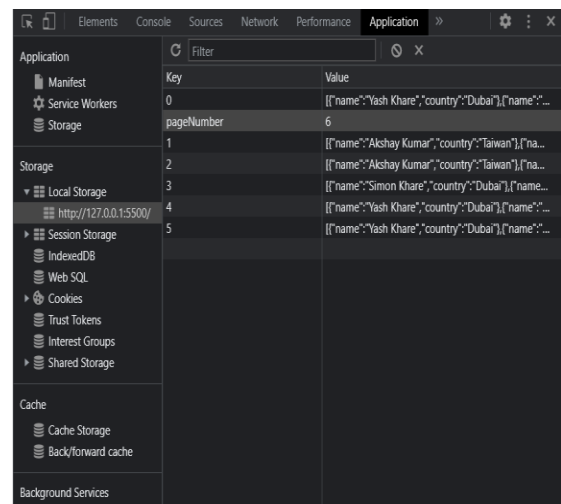
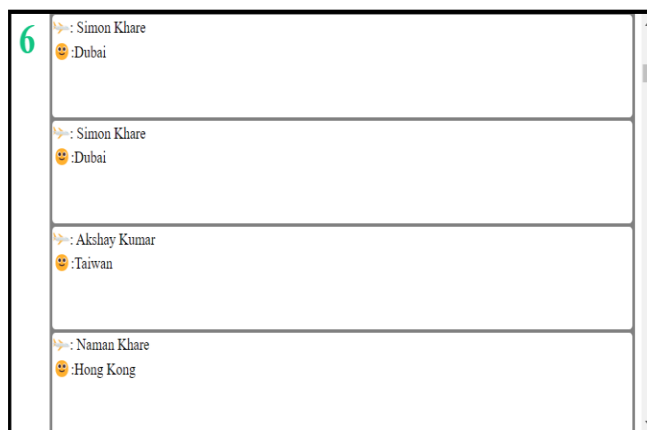
```

```

33
34     if (pageNum == 0) onFetch()
35
36     function onFetch() {
37         fetAPI().then((res) => {
38             const data = res.data
39
40             let objString = [];
41             for (let c of data) {
42                 content.innerHTML += `
43                 <div>
44                     <p> ${c.name}</p>
45                     <p> :${c.airline[0].country}</p>
46                 </div>
47                 `
48                 const obj = { name: c.name, country: c.airline[0].country };
49                 objString.push(obj);
50             }
51             localStorage.setItem(pageNum, JSON.stringify(objString));
52             pageNum++;
53             pageNumber.innerHTML = pageNum;
54             localStorage.setItem("pageNumber", pageNum)
55         })
56     }
57
58     fetchData_LocalStorage();
59     function fetchData_LocalStorage() {
60         for (let i in localStorage) {
61             const a=localStorage.getItem(i);
62             const b = JSON.parse(a);
63             if (Symbol.iterator in Object(b)) {
64                 const b = JSON.parse(a);
65                 for (let c of b) {
66                     content.innerHTML += `
67                     <div>
68                         <p> ${c.name}</p>
69                         <p> :${c.country}</p>
70                     </div>
71                     `
72                 }
73             }
74         }
75     }

```

- Result for Ex02



Exercise03: List and Viewer

`https://api.punkapi.com/v2/beers?`

Page=\${page}&per page=\${limit}`

Build a paginated scrollable list and design a details viewer next to the list.

*** Infinite Scroll + Local store sync

-index.html

Exercise03 > index.html > ...

```
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="stylesheet" href="./style.css">
9      <title>Exercise 3 List and View</title>
10 </head>
11 <body>
12 <div id="container">
13     <div><h1>Find your Favorite ?</h1></div>
14 <div id="block">
15     <div id="block_list"></div>
16     <div id="block_display"></div>
17 </div>
18 </div>
19 <script src="./listview.js"></script>
20 </body>
21 </html>
22
```

- style.scss

Exercise03 > style.scss > .builder

```
1  *{
2      margin: 0;
3      padding: 0;
4      box-sizing: border-box;
5  }
6  body{
7      display: flex;
8      justify-content: center;
9      margin: 5rem;
10 }
11 #container{
12     width: 1500px;
13     height: 800px;
14     border: 4px solid black;
15     display: grid;
16     justify-content: center;
17 }
18 #container h1{
19     font-family: 'Irish Grover', cursive;
20     padding-top: 50px;
21     text-align: center;
22 }
23 #block{
24     display: flex;
25     justify-content: center;
26 }
27 #block_list{
28     font-family: Arial, Helvetica, sans-serif;
29     width: 400px;
30     height: 500px;
31     background-color: #f4f4f4;
32     margin: 5px;
33     border-radius: 10px;
34     overflow-y: auto;
35 }
```



```

36  #block_display{
37      font-family: Arial, Helvetica, sans-serif;
38      border: 2px solid #f4f4f4;
39      width: 400px;
40      height: 500px;
41      background-color: white;
42      margin: 5px;
43      border-radius: 10px;
44      overflow-y: auto;
45  }
46
47  #loading{
48      margin-top: 250px;
49      width: 50%;
50      height: 100px;
51  }
52  .box_list{
53      display: flex;
54      margin-top: 5px;
55      margin-left: 10px;
56      width: 95%;
57      height: 100px;
58      background-color: white;
59      border-radius: 5px;
60  }
61  .image_list{
62      font-size: 40px;
63  }
64  .box_list:hover{
65      background-color: rgb(64, 105, 210);
66  }
67  .text1{
68      margin-top: 10px;
69  }
70  .text2{
71      margin-top: 10px;
72  }
73  .block_display_beer{
74      display: grid;
75      justify-content: center;
76  }
77  .image_beer{
78      display: flex;
79      justify-content: center;
80  }
81  .beer{
82      width: 200px;
83      height: 400px;
84      margin-top: 20px;
85  }
86  .description{
87      text-align: center;
88  }
89  .name{
90      margin-top: 10px;
91  }
92  .time{
93      margin-top: 10px;
94  }
95  .contribution{
96      margin-top: 10px;
97  }
98  .builder{
99      font-weight: bold;
100 }

```

- Listview.js

```
Exercise03 > 0: listview.js > ...
1  let list_data = document.getElementById("block_list");
2  let dataLoading =false;
3  let page=0;
4  let size=10;
5  let check=1;
6  let tmp="";
7  let parseddata="";
8  function click_display(){
9      let tmp1="";
10     for(let i=0,len=list_data.children.length;i<len;i++){
11         (function(index){
12             list_data.children[i].onclick=function(){
13                 tmp1=`
14                 <div class="block_display_beer">
15                     <div class="image_beer"></img></div>
16                     <div class="description">
17                         <h3 class="name">${parseddata[index].name}</h3>
18                         <p class="time">${parseddata[index].first_brewed}</p>
19                         <p class="des">${parseddata[index].description}</p>
20                         <p class="contribution">Contribution</p>
21                         <p class="bulider"> ( ${parseddata[index].contributed_by} )</p>
22                     </div>
23                 </div>`
24                 document.getElementById("block_display").innerHTML=tmp1;
25             }
26         })(i)
27     }
28 }
29 function display(){
30     let tmp="";
31     const str = localStorage.getItem('data');
32     parseddata = JSON.parse(str);
33     if(str!= null && check ==1){
34         console.log();
35         for(let i=0 ; i<parseddata.length;i++){
36             tmp +=
37             `<div class="box_list">
38                 <div class="image_list"> </div>
39                 <div>
40                     <p class="text1">${parseddata[i].name}</p>
41                     <p class="text2">${parseddata[i].description.substring(0, 30).concat('...')}</p>
42                 </div>
43             </div>`
44         }
45         list_data.innerHTML=tmp;
46         number_page=parseddata.length/10;
47         page=parseddata.length;
48         size=page+10;
49     }
50     if(size<81){
51         fetch(`https://api.punkapi.com/v2/beers? page=${page}&per_page=${size}`).then(async (res) =>{
52             let data_list = await res.json();
53             const data_json = JSON.stringify(data_list);
54             window.localStorage.setItem('data', data_json);
55             for(let i=page ; i<data_list.length;i++){
56                 tmp +=
57                 `<div class="box_list">
58                     <div> </div>
59                     <div class="list_each_data">
60                         <p class="text1">${data_list[i].name}</p>
61                         <p class="text2">${data_list[i].description.substring(0, 30).concat('...')}</p>
62                     </div>
63                 </div> `
64             }
65             document.getElementById("block_list").innerHTML=tmp;
66             click_display()
67         })
68     }
69 }
```

```

70 list_data.addEventListener("scroll", (event) => {
71     const { scrollTop, clientHeight, scrollHeight } = list_data;
72     if ((clientHeight + scrollTop) >= scrollHeight*0.98) {
73         if (!dataLoading) {
74             size = page +10;
75             display()
76         }
77     }
78 }
79 });
80 display();
81 click_display();
82

```

- Result for Ex03:

