



# **INTERNET PROGRAMMING**

TP6- JavaScript (Pagination, Local  
data sync)

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github : <https://github.com/ChhornKakada/IntenetProgramming/tree/tp6>

## ex1. Pagination (infinite scroll)

- [Index.html](#) (ex1. Pagination (infinite scroll))

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Pagination</title>
  <script src="./assets/tailwindcss.js"></script>
  <link rel="stylesheet" href="./assets/styles.css">
</head>
<body>
  <div class="w-[500px] h-[80vh] p-6 absolute top-[50%] left-[50%] border-2
  translate-x-[-50%] translate-y-[-50%] rounded-lg">
    <div class="h-full rounded-lg overflow-y-scroll" id="scroller">

    </div>
  </div>

  <script src="./assets/app.js"></script>
</body>
</html>
```

- [assets/app.js](#) (ex1. Pagination (infinite scroll))

```
let scrollerEle = document.getElementById("scroller");

let pageNum = 0;
let isLoading = false;
var toShow = "";

function fetchAPI(pageNumber) {
  isLoading = true;
  fetch(`https://api.instantwebtools.net/v1/passenger?page=${pageNumber}&size=15`)
    .then(async (res) => {
      let dataInfors = await res.json();
      toShow += `
        <div class="font-bold text-[1.5rem] px-2">${pageNumber + 1}</div>
      `;

      dataInfors.data.forEach(element => {
```

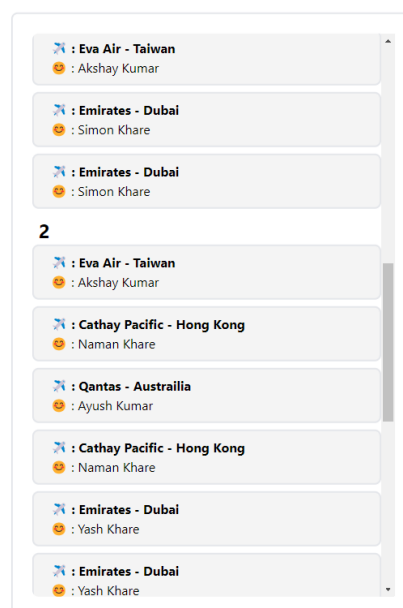
```

    toShow += `
      <div class="w-full border-2 rounded-lg px-5 py-2 mb-2 bg-[#F4F4F4]">
        <div class="font-bold">✈️ : ${element.airline[0].name} -
${element.airline[0].country}</div>
        <div>😊 : ${element.name}</div>
      </div>
    `;

  });
  scrollerEle.innerHTML = toShow;
  pageNum++;
  isLoading = false;
})
.then(() => {
  scrollerEle.addEventListener("scroll", () => {
    const { scrollTop, clientHeight, scrollHeight } = scrollerEle;
    if ((clientHeight + scrollTop) >= (scrollHeight * 0.95)) {
      if (!isLoading) {
        fetchAPI(pageNum);
      }
    }
  });
});
}.catch((err) => {
  alert(err);
});
}

fetchAPI(pageNum);

```



## ex2. Local data sync

- [index.html](#) (ex2. Local data sync)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Local data sync</title>
  <script src="./assets/tailwindcss.js"></script>
  <link rel="stylesheet" href="./assets/styles.css">
</head>
<body>
  <div class="w-[500px] h-[80vh] p-6 absolute top-[50%] left-[50%] border-2
  translate-x-[-50%] translate-y-[-50%] rounded-lg">
    <div class="h-full rounded-lg overflow-y-scroll" id="scroller">

    </div>
  </div>

  <script src="./assets/app.js"></script>
</body>
</html>
```

- [assets/app.js](#) (ex2. Local data sync)

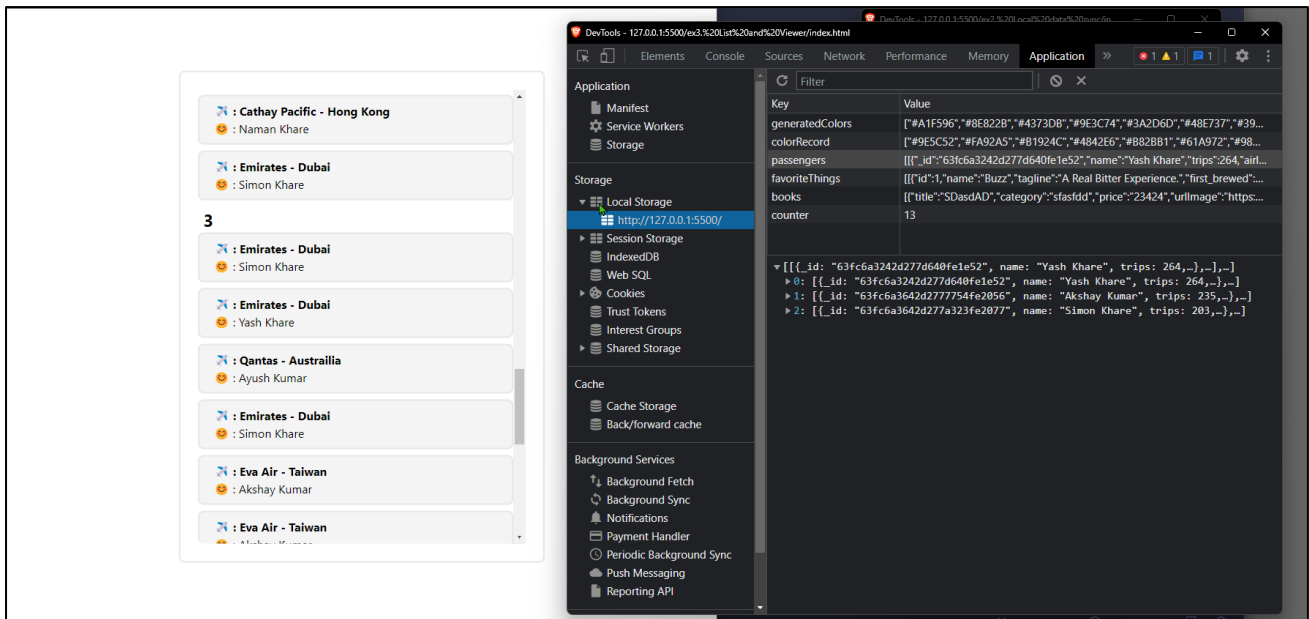
```
let scrollerEle = document.getElementById("scroller");

let pageNum = 0;
let isDataLoading = false;

var passengers = localStorage.getItem("passengers") != null ?
JSON.parse(localStorage.getItem("passengers")) : [];

// input as array
function displayAPage(dataAPage) {
  dataAPage.forEach(element => {
    scrollerEle.innerHTML += `
      <div class="w-full border-2 rounded-lg px-5 py-2 mb-2 bg-[#F4F4F4]">
        <div class="font-bold">✈️ : ${element.airline[0].name} -
${element.airline[0].country}</div>
        <div>😊 : ${element.name}</div>
      </div>
```

```
`  
});  
}  
  
function fetchDataFromLocal(pageNumber) {  
  displayAPage(passengers[pageNumber]);  
}  
  
function fetchData(pageNumber) {  
  scrollerEle.innerHTML += ` <div class="font-bold text-[1.5rem] px-2">${pageNumber  
+ 1}</div>`;   
  pageNum >= passengers.length ? fetchAPI(pageNum) : fetchDataFromLocal(pageNumber);  
  pageNum++;  
}  
  
function fetchAPI(pageNumber) {  
  isLoading = true;  
  fetch(`https://api.instantwebtools.net/v1/passenger?page=${pageNumber}&size=15`)  
    .then(async (res) => {  
      let dataInfors = await res.json();  
      passengers.push(dataInfors.data);  
      saveToLocalstorage(passengers);  
      displayAPage(dataInfors.data);  
      isLoading = false;  
    })  
    .catch((err) => {  
      alert(err);  
    });  
}  
  
const saveToLocalstorage = (data) => {  
  localStorage.setItem("passengers", JSON.stringify(data));  
}  
  
fetchData(pageNum);  
  
scrollerEle.addEventListener("scroll", () => {  
  const { scrollTop, clientHeight, scrollHeight } = scrollerEle;  
  if ((clientHeight + scrollTop) >= (scrollHeight * 0.95)) {  
    if (!isLoading) {  
      fetchData(pageNum);  
    }  
  }  
});
```



### ex3. List and Viewer

- [index.html](#) (ex3. List and Viewer)

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>List and Viewer</title>
  <script src="./assets/tailwindcss.js"></script>
  <link rel="stylesheet" href="./assets/styles.css">
</head>

<body>

  <div class="absolute left-[50%] translate-x-[-50%] py-10">
    <h1 class="juleeFont text-[4rem] text-center font-bold mb-6">Find your favorite
  </h1>
  <div class="flex gap-2 mx-auto">
    <!-- data list -->
    <div class="w-[400px] h-[700px] p-2 border-2 rounded-lg">
      <div class="h-full rounded-lg overflow-y-scroll" id="scroller">

      </div>
    </div>
    <!-- view data -->
    <div class="w-[400px] h-[700px] border-2 rounded-lg overflow-y-auto p-6">
```

```

        id="view">
        <center>
        <p class="text-[2rem] font-bold">Click on thing you want to view a
detail</p>
        </center>
        </div>
    </div>
</div>

<script src="./assets/app.js"></script>
</body>
</html>

```

- [assets/app.js](#) (ex3. List and Viewer)

```

let scrollerEle = document.getElementById("scroller");
let view = document.getElementById("view");

let pageNum = 1;
let isLoading = false;

var favoriteThings = localStorage.getItem("favoriteThings") != null ?
JSON.parse(localStorage.getItem("favoriteThings")) : [];

// input as array
function displayAPage(dataAPage) {
    dataAPage.forEach(element => {
        scrollerEle.innerHTML += `
        <button class="w-[97%] flex gap-2 items-center border-2 p-2 rounded-lg bg-
[#F4F4F4] mr-2 mb-2 something"
        onclick="viewDetail(${element.id})">
        <p class="text-[2rem]">👉</p>
        <div class="shorten text-left">
        <h3 class="font-bold">${element.name}</h3>
        <p class="shorten">${element.description}</p>
        </div>
        </button>
        `;
    });
}

function viewDetail(id) {
    for (let pNum of favoriteThings) {
        for (let ele of pNum) {
            if (ele.id == id) {
                view.innerHTML = `

```

```

        <center>
          
          <h3 class="font-bold">${ele.name}</h3>
          <p class="mb-4">${ele.first_brewed}</p>
          <p class="font-[500] mb-4">${ele.description}</p>
          <hr>
          <p class="font-medium mt-4">Contributor</p>
          <p class="mb-4 font-medium text-[1.2rem]">Sam Mason</p>
        </center>
      `
      break;
    }
  }
}

function fetchDataFromLocal(pageNumber) {
  displayAPage(favoriteThings[pageNumber]);
}

function fetchData(pageNumber) {
  scrollerEle.innerHTML += ` <div class="font-bold text-[1.5rem] px-2">${pageNumber}</div>`;
  pageNum > favoriteThings.length ? fetchAPI(pageNumber) :
  fetchDataFromLocal(pageNumber-1);
  pageNum++;
}

function fetchAPI(pageNumber) {
  isDataLoading = true;
  fetch(`https://api.punkapi.com/v2/beers?page=${pageNumber}&per_page=15`)
    .then(async (res) => {
      let datas = await res.json();
      favoriteThings.push(datas);
      saveToLocalStorage(favoriteThings);
      displayAPage(datas);
      isDataLoading = false;
    })
    .catch((err) => {
      alert(err);
    });
}

const saveToLocalStorage = (data) => {
  localStorage.setItem("favoriteThings", JSON.stringify(data));
}

```



```

fetchData(pageNum);

scrollerEle.addEventListener("scroll", () => {
  const { scrollTop, clientHeight, scrollHeight } = scrollerEle;
  if ((clientHeight + scrollTop) >= (scrollHeight * 0.95)) {
    if (!isLoading) {
      fetchData(pageNum);
    }
  }
});

```

