

CS 104: Web Technology - II Assignment #6

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1 Javascript Coding with Fetch Api (Using Promise objects)

The global `fetch()` method starts the process of fetching a resource from the network, returning a promise which is fulfilled once the response is available.

The promise resolves to the Response object representing the response to your request.

A `fetch()` promise only rejects when a network error is encountered (which is usually when there's a permissions issue or similar). A `fetch()` promise does not reject on HTTP errors (404, etc.). Instead, a `then()` handler must check the `Response.ok` and/or `Response.status` properties.

1.1 Syntax

```
syntax
fetch(resource)
fetch(resource, options)
```

1.2 Return Value

A Promise that resolves to a Response object.

1.2.1 Attributes

1. body
2. bodyUsed
3. headers
4. ok
5. redirected
6. status -> CODE- 100 to 900
7. statusText -> For 200, OK
8. type (cors, basic)
9. url

1.2.2 Static Methods

1. error
2. redirect

1.2.3 Object Methods

1. json()
2. text()
3. formData()
4. blob()

2 Objectives of Lab

1. To learn to use Promise object using fetch api in javascript.
2. To use the fetch api to build an image gallery.

3 Examples

```
image.js
1  const myImage = document.querySelector('img');
2
3  const myRequest = new Request('https://mdn.github.io/dom-examples/fetch/
4  fetch-with-init-then-request/flowers.jpg');
5
6  fetch(myRequest)
7    .then((response) => {
8      if (!response.ok) {
9        throw new Error('HTTP error! Status: ${response.status}');
10     }
11
12     return response.blob();
13   })
14   .then((response) => {
15     myImage.src = URL.createObjectURL(response);
16   });
```

```
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" />
7
8     <title>Fetch with init then Request example</title>
9
10    <link rel="stylesheet" href="" />
11  </head>
12
13  <body>
14    <h1>Fetch with init then Request example</h1>
15    <img src="" />
16  </body>
17  <script>
18    const myImage = document.querySelector("img");
19
20    const myHeaders = new Headers();
21    myHeaders.append("Content-Type", "image/jpeg");
22
23    const myOptions = {
24      method: "GET",
25      headers: myHeaders,
26      mode: "cors",
27      cache: "default",
28    };
29
30    const myRequest = new Request("https://mdn.github.io/dom-examples/fetch/
31    /fetch-with-init-then-request/flowers.jpg");
32
33    fetch(myRequest, myOptions)
34      .then((response) => {
35        if (!response.ok) {
36          throw new Error('HTTP error, status = ${response.status}');
37        }
38        return response.blob();
39      })
40      .then((blob) => {
41        const objectURL = URL.createObjectURL(blob);
42        myImage.src = objectURL;
43      })
44      .catch((error) => {
45        var p = document.createElement("p");
46        p.appendChild(document.createTextNode('Error: ${error.message}'));
47        document.body.insertBefore(p, myImage);
48      });
49  </script>
50 </html>
51
```

4 Exercise

Question 1

Build a gallery with 5x5 grid using datocms.