

W01 Reading (L5)

Chapter 13: Ajax

What is Ajax?

It is a technique that allows web pages to communicate asynchronously with a server.(JavaScript と XML を使って非同期にサーバとの間の通信を行うこと)

1. Same-origin policy

It blocks all requests from a domain that is different from the page making the request.

APIs: An application programming interface is a collection of methods that allows external access to another program or service.

2. The Fetch API

(The Fetch API is a **modern interface that allows you to make HTTP requests to servers from web browsers**)

Basic Usage

- A global `fetch()` method: mandatory arguments

E.g. `fetch('https://example.com/data')`
`.then(// code that handles the response)`
`.catch(// code that runs if the server returns an error`

- The promise will be resolved when a response is received from the URL.
- Because it's a promise, we can also use a `catch` statement

3. Request interface

The web is built upon HTTP. When a client (usually a browser) makes a request to a server, it contains information about which HTTP verb to use.

The five most used verbs

- GET requests to retrieve resources
- POST requests, usually used to create a resource but can actually perform any task
- PUT requests to upsert which means insert a resource or update it Entirely
- PATCH requests to make partial updates to a resource
- DELETE requests to delete a resource.

e.g.

```
fetch('https://example.com/data', {  
  method: 'GET',  
  mode: 'cors',  
  redirect: 'follow',  
  cache: 'no-cache'  
})  
.then( // do something with the response )  
.catch( // handle any errors)
```

4. FormData

The Fetch API includes FormData interface, which make it easier to submit information in forms using Ajax.

A FormData instance is created using a constructor function:

```
const data = new FormData();
```

<https://developer.mozilla.org/ja/docs/Web/API/FormData/FormData>