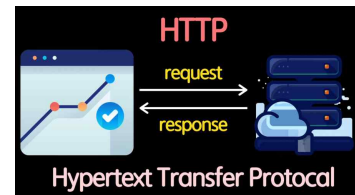


10. JSON

1. HTTP

Client <-----> Server



2. AJAX(Asynchronous JavaScript And XML)

1) XHR(XMLHttpRequest) Object

2) fetch() API -> IE(x)

3) XML



4) JSON(JavaScript Object Notation)

☞ ECMAScript 3rd 1999

☞ Object { key:value }

- ✓ simplest data interchange format
- ✓ lightweight text-based structure
- ✓ easy to read
- ✓ key-value pairs
- ✓ used for serialization and transmission of data between the network the network connection
- ✓ independent programming language and platform

```
    { key:value }
Client <-----> Server
    { key:value }
```

// (1) Object to JSON

```
    serialize
Object -----> String(JSON)           // stringify(obj)
```

// (2) JSON to Object

```
    deserialize
Object <----- String(JSON)           // parse(json)
```

☑ JSON(JavaScript Object Notation)

```
// (1) Object to JSON
// stringify(obj)
let json = JSON.stringify(true);
console.log(json);

json = JSON.stringify(['apple', 'banana']);
console.log(json);

const rabbit = {
  name: 'tori',
  color: 'white',
  size: null,
  birthDate: new Date(),
  //symbol: Symbol('id'),
  jump: () => {
    console.log(`${name} can jump!`);
  },
};

json = JSON.stringify(rabbit);
console.log(json);

json = JSON.stringify(rabbit, ['name', 'color', 'size']);
console.log(json);

json = JSON.stringify(rabbit, (key, value) => {
  console.log(`key: ${key}, value: ${value}`);
  //return value;
  return key === 'name' ? 'ecom01' : value;
});
console.log(json);

// (2) JSON to Object
// parse(json)
console.clear();
json = JSON.stringify(rabbit);
console.log(json);
//const obj = JSON.parse(json);
const obj = JSON.parse(json, (key, value) => {
  console.log(`key: ${key}, value: ${value}`);
  return key === 'birthDate' ? new Date(value) : value;
});
```

```
console.log(obj);  
rabbit.jump();  
//obj.jump(); --> error
```

```
console.log(rabbit.birthDate.getDate());  
//console.log(obj.birthDate.getDate()); --> error[getDate()는 string이기 때문]  
console.log(obj.birthDate);  
console.log(obj.birthDate.getDate());
```

- ☞ JSON Diff checker: <http://www.jsondiff.com/>
- ☞ JSON Beautifier/editor: <https://jsonbeautifier.org/>
- ☞ JSON Parser: <https://jsonparser.org/>
- ☞ JSON Validator: <https://tools.learningcontainer.com/j...>