MEAN 스택 활용 웹 개발

JSON 개요



2016년도 2학기 2학년 방과후학교

JSON 개요

- http://www.json.org/json-ko.html
- http://www.w3schools.com/json



JSON: JavaScript Object Notation.

JSON is a syntax for storing and exchanging data.

JSON is an easier-to-use alternative to XML.

XML vs JSON

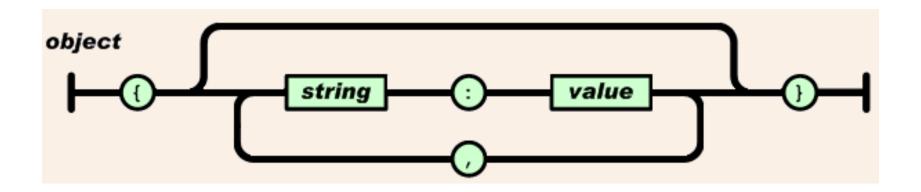
XML Example

JSON Example

```
{"employees":[
          {"firstName":"John", "lastName":"Doe"},
          {"firstName":"Anna", "lastName":"Smith"},
          {"firstName":"Peter", "lastName":"Jones"}
]}
```

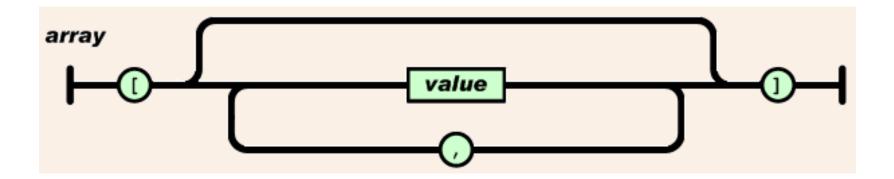
JSON Object

- An object is an unordered set of name/value pairs.
- An object begins with { (left brace) and ends with } (right brace).
- Each name is followed by: (colon) and the name/value pairs are separated by, (comma).



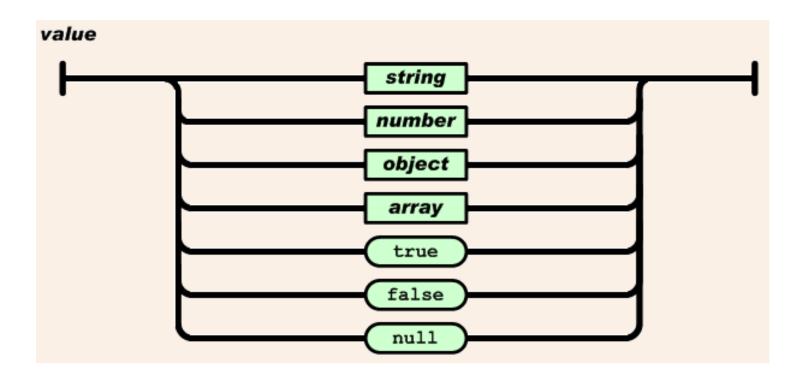
JSON Array

- An array is an ordered collection of values.
- An array begins with [(left bracket) and ends with] (right bracket).
- Values are separated by , (comma).



JSON Value

- A value can be a string in double quotes, or a number, or true or false or null, or an object or an array.
- These structures can be nested.



JSON 개요

■ JSON 객체 생성

```
person.html
      <!DOCTYPE html>
      <html>
   3 <body>
   4 <h2>JSON 객체 생성</h2>
   5 
   6 <script>
      var obj = {"name":"아이유","job":"가수","phone":"010-1234-5678"};
      document.getElementById("person").innerHTML =
  10
      obj.name + "<br>" + obj.job + "<br>" + obj.phone;
      </script>
  11
                                                                          X
                                                         perso ×
      </body>
  12
                                                         ← → C 🖒 🗋 file:///C:/nc🏠 🗉 🗏
  13 </html>
                                                         JSON 객체 생성
                                                         아이유
                                                         가수
                                                         010-1234-5678
```

JSON 문법

- Data is in name/value pairs
- Data is separated by commas
- Curly braces hold objects
- Square brackets hold arrays

```
{"name":"아이유","job":"가수","phone":"010-1234-5678"}
```

JSON values can be:

- A number (integer or floating point)
- A string (in double quotes)
- A Boolean (true or false)
- An array (in square brackets)
- An object (in curly braces)
- null

JSON 배열

■ JSON 배열 생성

```
← → C 🔐 🗋 file:///C:/noc৯ 🖃
people.html ×
                                                               JSON 배열 생성
   1 <!DOCTYPE html>
      <html>
                                                               GD - 가수 - 010-1111-2222
   3 <body>
                                                               송중기 - 배우 - 010-3333-4444
   4 <h2>JSON 배열 생성</h2>
                                                               수지 - 가수겸배우 - 010-5555-6666
      6 <script>
      var arr = [
          {"name":"GD", "job":"가수","phone":"010-1111-2222"},
          {"name":"송중기", "job":"배우","phone":"010-3333-4444"},
          {"name": "수지", "job": "가수겸배우", "phone": "010-5555-6666"}
  11 ];
  12
  13 var result = '';
      for(var i = 0; i < arr.length; i++) {</pre>
          result += arr[i].name + " - " + arr[i].job + " - " + arr[i].phone + "<br>"
      document.getElementById("person").innerHTML = result;
  18 </script>
  19 </body>
      </html>
```

□ pε × _____

JSON 객체 변환

var obj = JSON.parse(text); // String 값을 JSON Object로 변환

```
person2.html ×
      <!DOCTYPE html>
   2 <html>
      <body>
   4 <h2>JSON 객체 생성</h2>
   5 
   6 <script>
      var text = '{"name":"아이유","job":"가수","phone":"010-1234-5678"}';
      var obj = JSON.parse(text);
      document.getElementById("person").innerHTML =
      obj.name + "<br>" + obj.job + "<br>" + obj.phone;
      </script>
                                                                        \times
                                                        12 </body>
                                                        ← → C 🔐 🗋 file:///C:/no☆ 🖃
      </html>
                                                        JSON 객체 생성
                                                        아이유
                                                        가수
                                                        010-1234-5678
```

JSON 실습

```
customer.html •
         <!DOCTYPE html>
         <html>
         <body>
        <h1>Customers</h1>
         <div id="result"></div>
        <script>
         var xmlhttp = new XMLHttpRequest();
        var url = "http://www.w3schools.com/website/customers mysql.php";
                                                                                                  🖺 customer.html
        xmlhttp.onreadystatechange=function() {
                                                                                                 ← → C 🕆 🗋 file:///C:/node_worl☆ 😐 🔢 🗉
              if (xmlhttp.readyState == 4 && xmlhttp.status == 200) {
                   myFunction(xmlhttp.responseText);
                                                                                                 Customers
        }
                                                                                                 Alfreds Futterkiste-Berlin-Germany
                                                                                                 Berglunds snabbköp-Luleå-Sweden
        xmlhttp.open("GET", url, true);
                                                                                                 Centro comercial Moctezuma-México D.F.-Mexico
        xmlhttp.send();
                                                                                                 Ernst Handel-Graz-Austria
                                                                                                 FISSA Fabrica Inter. Salchichas S.A.-Madrid-Spain
                                                                                                 Galería del gastrónomo-Barcelona-Spain
                                                                                                 Island Trading-Cowes-UK
   18 □ function myFunction(response) {
                                                                                                 Königlich Essen-Brandenburg-Germany
                                                                                                 Laughing Bacchus Wine Cellars-Vancouver-Canada
                                                                                                 Magazzini Alimentari Riuniti-Bergamo-Italy
                                                                                                 North/South-London-UK
         </script>
                                                                                                 Paris spécialités-Paris-France
                                                                                                 Rattlesnake Canyon Grocery-Albuquerque-USA
                                                                                                 Simons bistro-København-Denmark
                                                                                                 The Big Cheese-Portland-USA
         </body>
                                                                                                 Vaffeljernet-Århus-Denmark
         </html>
                                                                                                 Wolski Zajazd-Warszawa-Poland
```