**JSON**

What is JSON?

JSON (JavaScript Object Notation) is text, written with JavaScript object notation,

for storing and exchanging data.

* Lightweight data-interchange format.
* “Self-describing” and easy to understand.
* Language independent.
* JSON is text, convert any JavaScript object into JSON and send JSON to the server.

For more information: json.org

JSON format

* JSON is built on two structures: object (a collection of key/value pairs), array (an ordered list of values).
* Objects are represented by curly braces ( **{ }** ).
* Keys and values are separated by a colon ( **:** ).
* Keys must be strings, and values must be a valid JSON data type

(string, number, object, array, boolean or null).

* Strings must be in double quotes ( **“ ”** ).
* Arrays are represented by square brackets ( **[ ]** ).
* Key/value pairs of objects and values of arrays are separated by a comma ( **,** ).

**Object sample : {"title" : "The Mask", "genre" : "Comedy"}**

**Array sample : ["Tom Cruise", "Jim Carrey", "Brad Pitt"]**

Function: JSON.parse()

* When receiving data from a web server, the data is always a string.
* JSON.parse() allows the data(string) to becomes a JavaScript object.

JSON.parse( JSON(object) )

var movieString = '{"title":"The Mask","genre":"COMEDY"}';

var movie = JSON.parse(movieString);

alert(movie.title); // “The Mask”

JSON.parse( JSON(array) )

var actorString = '["Tom Cruise", "Jim Carrey", "Brad Pitt"]';

var actor = JSON.parse(actorString);

alert(actor[1]); // “Jim Carrey”

Function: JSON.stringify()

* When sending data to a web server, the data has to be a string.
* Convert a JavaScript object into a string with JSON.stringify().

JSON.stringify( JavaScript object )

var movie = new Object();

movie.title = "The Mask";

movie.genre = "Comedy";

var movieString = JSON.stringify(movie);

alert(movieString); // {"title" : "The Mask", "genre" : "Comedy"}

JSON.stringify( JavaScript array )

var actor = new Array("Tom Cruise", "Jim Carrey", "Brad Pitt");

var actorString = JSON.stringify(actor);

alert(actorString); // ["Tom Cruise", "Jim Carrey", "Brad Pitt"]