

JSON Access & Object

- ✱ **JSON Request/Response** is a browser service that permits **two-way data exchange with a JSON data server**.
- ✱ This is made possible via script elements on the pages with the assumption that the browser will extend its support to process JSON data as follows:

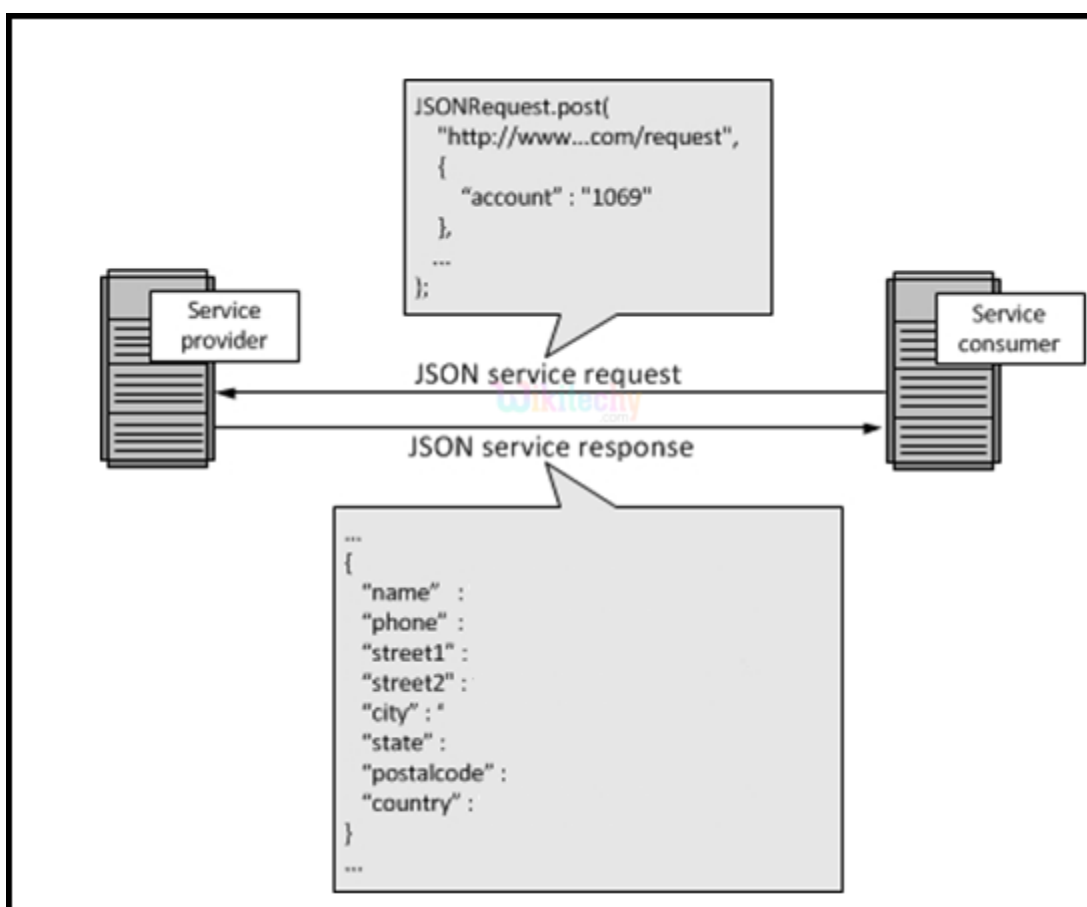


Fig1. JSON Service Request and Response

Sample Code:

```
<!DOCTYPE html>
<html>
<head>
  <!-- string in javascript variable -->
<script type="text/javascript">
  var WikiTechy = {
    websiteName: "www.wikitechy.com",
    type: "technology website",
    current: "json basics",
    author : "venkatesan prabu"
  };
  <!-- convert string to json variable -->
  var jsonText = JSON.stringify(WikiTechy);
  document.writeln(jsonText);

  <!-- fetch Object from json variable -->
  var parse_Details = JSON.parse(jsonText);
  document.writeln("<br><br>" + parse_Details);
```



```
<!-- fetch values from json variable -->
    var parse_Details = JSON.parse(jsonText);
    document.writeln("<br><br>" +
parse_Details.websiteName);
    document.writeln("<br><br>" + parse_Details.type);
    document.writeln("<br><br>" + parse_Details.current);
    document.writeln("<br><br>" + parse_Details.author);

</script>
</head>
<body>
</body>
</html>
```

Code Explanation:

- 1 The script element defines a javascript as its type by the code:
`<script type="text/javascript">`
- 2 A variable is declared with the name "WikiTechy".
- 3 The data in the form of key value pairs to define a website name, its type, its current topic and author is declared as follows:



```
var WikiTechy = {  
    websiteName: "www.wikitechy.com",  
    type: "technology website",  
    current: "json basics",  
    author : "venkatesan prabu"  
};
```

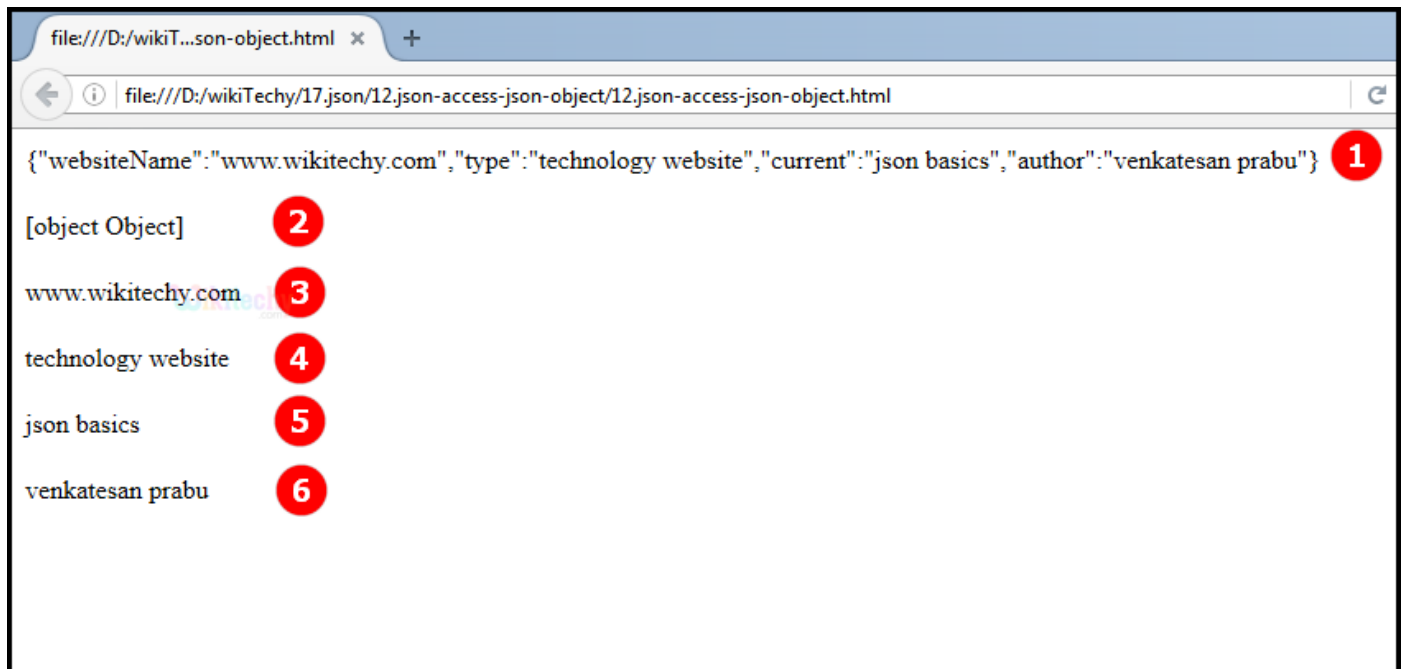
- 4 The code `var jsonText = JSON.stringify(WikiTechy);` converts the JSON string `WikiTechy` into a JavaScript variable.
- 5 The code `document.writeln(jsonText);` writes the content of the variable `"jsonText"` to the output window.

```
<!DOCTYPE html>
<html>
<head>
  <!-- string in javascript variable -->
  <script type="text/javascript">
    var WikiTechy = {
      websiteName: "www.wikitechy.com",
      type: "technology website",
      current: "json basics",
      author : "venkatesan prabu"
    };
    <!-- convert string to json variable -->
    var jsonText = JSON.stringify(WikiTechy);
    document.writeln(jsonText);
    <!-- fetch Object from json variable -->
    var parse_Details = JSON.parse(jsonText);
    document.writeln("<br><br>" + parse_Details);
    <!-- fetch values from json variable -->
    var parse_Details = JSON.parse(jsonText);
    document.writeln("<br><br>" + parse_Details.websiteName);
    document.writeln("<br><br>" + parse_Details.type);
    document.writeln("<br><br>" + parse_Details.current);
    document.writeln("<br><br>" + parse_Details.author);
  </script>
</head>
<body>
</body>
</html>
```

- 6 The code `var parse_Details = JSON.parse(jsonText);` fetches the object from `jsonText`.
- 7 The code `document.writeln("<br><br>" + parse_Details);` outputs the content of `"parse_Details"` variable to the output window.

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- 8 The code `document.writeln("<br> <br>" + parse_Details.jsonwebsite. websiteName);` outputs the value of key variable "websiteName" to the output window.
- 9 Similarly, the code
`document.writeln("<br> <br>" + parse_Details.jsonwebsite.type);`
`document.writeln("<br> <br>" + parse_Details.jsonwebsite.current);`
`document.writeln("<br> <br>" + parse_Details.jsonwebsite.author);`
outputs the value of keys type, current and author.
- 10 Finally, JSON code is completed with the ending script element as `</script>`.

Sample Output:



- 1 The variable `jsonwebsite` is displayed in the browser as

```
{"jsonwebsite": { "websiteName": "www.wikitechy.com", "type":  
"technology website", "current": "json basics", "author" :  
"venkatesan prabu"} }
```
- 2 The output `"[object Object]"` is shown in browser as a result of printing the `"parse_Details"` variable.
- 3 The website name is printed as `"www.wikitechy.com"` by the code

```
document.writeln("<br> <br>" + parse_Details.jsonwebsite.  
websiteName);
```

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- 4 The website type is printed as "technology website" by the code
`document.writeln("<br> <br>" + parse_Details.jsonwebsite.type);`
 - 5 The website current topic is printed as "json basics" by the code
`document.writeln("<br> <br>" + parse_Details.jsonwebsite.current);`
 - 6 The website author is printed as "venkatesan prabu" by the code
`document.writeln("<br> <br>" + parse_Details.jsonwebsite.author);`