



WEB разработка

AJAX

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AJAX

AJAX

Ajax/AJAX

/'eɪdʒæks/;

short for asynchronous JavaScript and XML

AJAX

a set of [web development](#) techniques using many web technologies on the [client side](#) to create [asynchronous web applications](#).

AJAX

With Ajax, web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behavior of the existing page.

By decoupling the data interchange layer from the presentation layer, Ajax allows web pages and, by extension, web applications, to change content dynamically without the need to reload the entire page.

AJAX is the art of exchanging data with a server, and update parts of a web page - without reloading the whole page.

jQuery & ajax

jQuery & ajax

Loading Simple Data

`[selector].load(URL, [data], [callback]);`

- **URL** – *The URL of the server-side resource to which the request is sent. It could be a CGI, ASP, JSP, or PHP script which generates data dynamically or out of a database.*
- **data** – *This optional parameter represents an object whose properties are serialized into properly encoded parameters to be passed to the request. If specified, the request is made using the **POST** method. If omitted, the **GET** method is used.*
- **callback** – *A callback function invoked after the response data has been loaded into the elements of the matched set. The first parameter passed to this function is the response text received from the server and second parameter is the status code.*

jQuery & ajax

Getting JSON Data

...

json

json

JavaScript Object Notation (JSON)

(/ˈdʒeɪsən/)

is an open-standard file format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types (or any other serializable value).

It is a very common data format used for asynchronous browser–server communication /AJAX-style systems/.

JSON is a language-independent data format.

It was derived from JavaScript, but as of 2017 many programming languages include code to generate and parse JSON-format data.

The official Internet media type for JSON is application/json.

JSON filenames use the extension .json.

json

```
{  
  "firstName": "John",  
  "lastName": "Smith",  
  "age": 25,  
  "address": {  
    "streetAddress": "21 2nd Street",  
    "city": "New York",  
    "state": "NY",  
    "postalCode": "10021"  
  },  
  "phoneNumber": [  
    {  
      "type": "home",  
      "number": "212 555-1234"  
    },  
    {  
      "type": "fax",  
      "number": "646 555-4567"  
    }  
  ]  
}
```

json

```
{ "firstName": "John", "lastName": "Smith", "age": 25, "address": {"streetAddress": "21 2nd Street", "city": "New York",  
"state": "NY", "postalCode": "10021"}, "phoneNumber": [{ "type": "home", "number": "212 555-1234"}, { "type": "fax", "number":  
"646 555-4567"}]}
```

jQuery & ajax

Getting JSON Data

There would be a situation when server would return JSON string against your request.

JQuery utility function **getJSON()** parses the returned JSON string and makes the resulting string available to the callback function as first parameter to take further action.

jQuery & ajax

[selector].getJSON(URL, [data], [callback]);

- **URL** – *The URL of the server-side resource contacted via the GET method.*
- **data** – *An object whose properties serve as the name/value pairs used to construct a query string to be appended to the URL, or a preformatted and encoded query string.*
- **callback** – *A function invoked when the request completes. The data value resulting from digesting the response body as a JSON string is passed as the first parameter to this callback, and the status as the second.*

jQuery & ajax

Passing Data to the Server

Many times you collect input from the user and you pass that input to the server for further processing.

JQuery AJAX made it easy enough to pass collected data to the server using **data** parameter of any available Ajax method.

PHP & json

PHP & json

json_encode()

Returns the JSON representation of a value

PHP & json

[json_decode\(\)](#)

Decodes a JSON string

jQuery & ajax

`$.ajax(url [, settings])`

<http://api.jquery.com/jquery.ajax/>

Demo->