

Web technologies

Asynchronous JavaScript and XML

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The purpose of AJAX

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 - However, this is not the case, when the data is already loaded and accessible to JavaScript.
- **Solution:** AJAX – Asynchronous JavaScript and XML – allows us to update the contents of the page without reloading the browser.
- This provides a nicer user experience.

The internals of AJAX

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- This means that we can send an HTTP request, get the response, and use JavaScript to update the page (DOM).

AJAX: The workflow

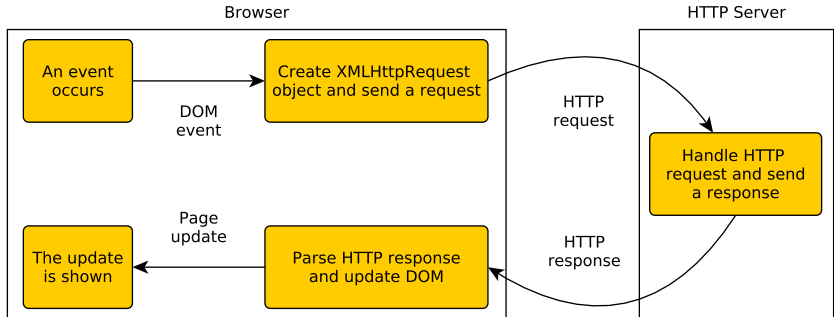


Figure: AJAX workflow

AJAX: Code example

```
1 var url = "http://localhost/ex9/index.php/book/add";
2 var req = new XMLHttpRequest();
3 req.onreadystatechange = function() {
4     if (req.readyState==4 && req.status==200) {
5         alert(req.responseText);
6     }
7 }
8 req.open("POST", url, true);
9 req.setRequestHeader("Content-type","application/x-www- →
    ↪ form-urlencoded");
10 req.send("title=Donald+Knuth&title=The+art+of+computer+ →
    ↪ programming&year=1997&price=200");
```

Listing 1: PHP - jQuery and AJAX

Using jQuery for AJAX

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- With jQuery, AJAX gets a lot simpler.

```
1 $("#my-button").click(function () {  
2     $.post("http://localhost/ex9/index.php/book/add",  
3     {author: "Donald Knuth", title: "The art of computer  
    ↪ programming", price: 200, year: 1997},  
4     function(data, status){  
5         alert("Server responded: " + data + "\nStatus: "  
    ↪ + status);  
6     });  
7 });
```

Listing 4: PHP - jQuery and AJAX

Resources

- http://www.w3schools.com/jquery/jquery_ajax_intro.asp
- <http://api.jquery.com/jquery.ajax>
- <http://api.jquery.com/jquery.get>
- <http://api.jquery.com/jquery.post>