

AJAX

Why AJAX?

Sometimes we need to update a web page without reloading the entire web page. It means the display of the entire webpage need not be changed by fetching it again, but only a small part of it is changed.

For example, when you comment on a post on social media, the entire webpage doesn't reload alongside the comment that appears on the post.

Ajax is very useful when only some parts of a web page need to be changed instead of fetching it again by reloading.

What is AJAX?

AJAX stands for Asynchronous JavaScript And XML.
XML further stands for Extensible Markup Language.

It is not a programming or a scripting language. It is a group of inter-related technologies like JavaScript, XML, HTML, CSS, and DOM.

It has these benefits -

- Update a web page without reloading the page
- Receive and send data asynchronously
- Send only important data to the server
- Makes the application faster

AJAX Request with jQuery

AJAX communicates asynchronously with the server using the XMLHttpRequest object. AJAX performs the following operations -

- Sends data from the client in the background
- Receives the data from the server
- Updates the web page without reloading it.

The jQuery 'ajax()' method sends asynchronous HTTP requests to the server. The syntax for ajax() is - `$.ajax(url, [settings])`

Ajax request made using jQuery looks like:

```
$.ajax({  
  url: 'example.html',  
  method: 'GET',  
  data: {  
    name: 'Rahul Kumar',  
    age: 19  
  },  
  success: function(data,status,xhr) {  
    console.log(data);  
  },  
  error: function(err) {  
    console.log(data);  
  }  
});
```

url - a string containing the URL to which the request is sent. The 'url' can be provided as seen in the syntax or there is also a url property in 'settings' as seen in the example.

method - the HTTP method to use for the request (e.g. "POST", "GET", "PUT").

data - data to be sent to the server. It can be a JSON object, string or array.

success - a callback function to be executed when Ajax request succeeds.

NOTE: You'll be writing code for sending an AJAX request in the next video and will get more clarity on this alongside!