

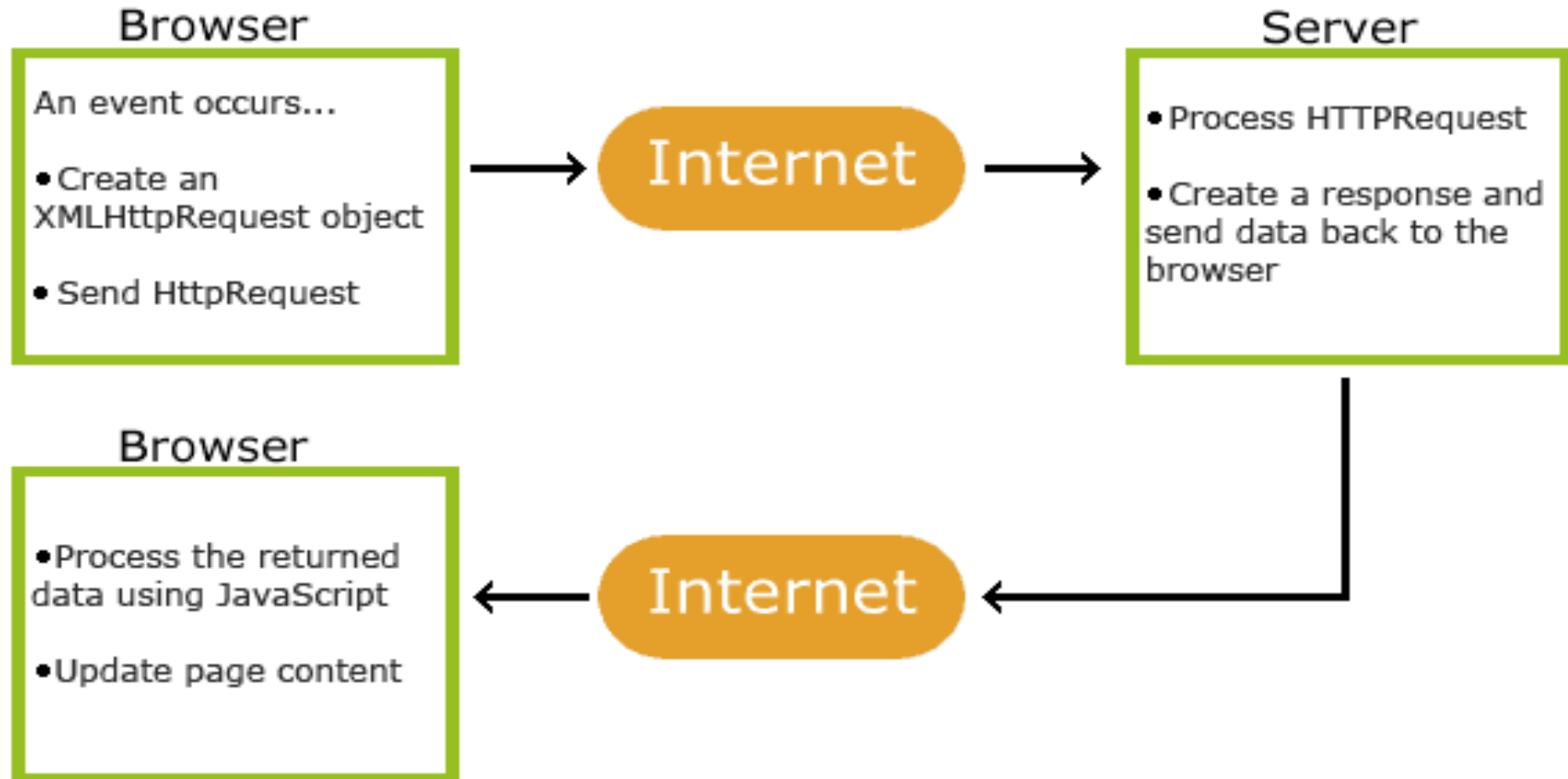


AJAX

- AJAX = **A**synchronous **J**avaScript **A**nd **X**ML.
- AJAX is not a programming language.
- AJAX just uses a combination of:
- A browser built-in XMLHttpRequest object (to request data from a web server)
- JavaScript and HTML DOM (to display or use the data)
- AJAX allows web pages to be updated asynchronously by exchanging data with a web server behind the scenes. This means that it is possible to update parts of a web page, without reloading the whole page.



How AJAX Works





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1. An event occurs in a web page (the page is loaded, a button is clicked)
2. An XMLHttpRequest object is created by JavaScript
3. The XMLHttpRequest object sends a request to a web server
4. The server processes the request
5. The server sends a response back to the web page
6. The response is read by JavaScript
7. Proper action (like page update) is performed by JavaScript



The XMLHttpRequest Object

- All modern browsers support the XMLHttpRequest object.
- The XMLHttpRequest object can be used to exchange data with a server behind the scenes.
- This means that it is possible to update parts of a web page, without reloading the whole page.
- Syntax for creating an XMLHttpRequest object:

```
var xhttp = new XMLHttpRequest();
```



AJAX Example

```
<!DOCTYPE html>
<html>
<body>
  <div id="demo">
<h1>The XMLHttpRequest Object</h1>
<button type="button"
  onclick="loadDoc()">Change
  Content</button>
</div>
  <script>
function loadDoc() {
  var xhttp = new XMLHttpRequest();
  xhttp.onreadystatechange = function()
```

```
if (this.readyState == 4 && this.status == 200)
{
document.getElementById("demo").innerHTML =
  this.responseText;
}
};
xhttp.open("GET", "ajax_info.txt", true);
xhttp.send();
}
</script>
</body>
</html>
```



Output

The XMLHttpRequest Object

Change Content

The output will look like the following after the change content button has been clicked.

AJAX

AJAX is not a programming language.

AJAX is a technique for accessing web servers from a web page.

AJAX stands for Asynchronous JavaScript And XML.