

06. AJAX PHP Example.

6.1. AJAX PHP

AJAX is used to create more interactive applications.

The following example demonstrates how a web page can communicate with a web server while a user types characters in an input field:

Example:

```
<!DOCTYPE html>
<html>
<body>

<h2>The XMLHttpRequest Object</h2>

<h3>Start typing a name in the input field below:</h3>

<p>Suggestions: <span id="txtHint"></span></p>

<p>First name: <input type="text" id="txt1"
onkeyup="showHint(this.value)"></p>

<script>
function showHint(str) {
    var xhttp;
    if (str.length == 0) {
        document.getElementById("txtHint").innerHTML = "";
        return;
    }
    xhttp = new XMLHttpRequest();
    xhttp.onreadystatechange = function() {
        if (this.readyState == 4 && this.status == 200) {
            document.getElementById("txtHint").innerHTML =
this.responseText;
        }
    };
    xhttp.open("GET", "gethint.php?q="+str, true);
    xhttp.send();
}
</script>

</body>
</html>
```

6.2. Example Explained

In the example above, when a user types a character in the input field, a function called "showHint()" is executed.

The function is triggered by the onkeyup event.

Example: Here is the HTML code:

```
<html>
<head>
<script>
function showHint(str) {
    if (str.length == 0) {
        document.getElementById("txtHint").innerHTML = "";
        return;
    } else {
        var xmlhttp = new XMLHttpRequest();
        xmlhttp.onreadystatechange = function() {
            if (this.readyState == 4 && this.status == 200) {
                document.getElementById("txtHint").innerHTML =
this.responseText;
            }
        };
        xmlhttp.open("GET", "gethint.php?q=" + str, true);
        xmlhttp.send();
    }
}
</script>
</head>
<body>

<p><b>Start typing a name in the input field below:</b></p>
<form>
First name: <input type="text" onkeyup="showHint(this.value)">
</form>
<p>Suggestions: <span id="txtHint"></span></p>
</body>
</html>
```

Code explanation:

First, check if the input field is empty (str.length == 0). If it is, clear the content of the txtHint placeholder and exit the function.

However, if the input field is not empty, do the following:

- Create an XMLHttpRequest object
- Create the function to be executed when the server response is ready
- Send the request off to a PHP file (gethint.php) on the server
- Notice that q parameter is added gethint.php?q="+str
- The str variable holds the content of the input field

6.3. The PHP File - “gethint.php”

The PHP file checks an array of names, and returns the corresponding name(s) to the browser:

Example: PHP File

```
<?php
// Array with names
$a[] = "Anna";
$a[] = "Brittany";
$a[] = "Cinderella";
$a[] = "Diana";
$a[] = "Eva";
$a[] = "Fiona";
$a[] = "Gunda";
$a[] = "Hege";
$a[] = "Inga";
$a[] = "Johanna";
$a[] = "Kitty";
$a[] = "Linda";
$a[] = "Nina";
$a[] = "Ophelia";
$a[] = "Petunia";
$a[] = "Amanda";
$a[] = "Raquel";
$a[] = "Cindy";
$a[] = "Doris";
$a[] = "Eve";
$a[] = "Evita";
$a[] = "Sunniva";
$a[] = "Tove";
$a[] = "Unni";
$a[] = "Violet";
$a[] = "Liza";
$a[] = "Elizabeth";
$a[] = "Ellen";
$a[] = "Wenche";
$a[] = "Vicky";

// get the q parameter from URL
```

```
$q = $_REQUEST["q"];

$hint = "";

// lookup all hints from array if $q is different from ""
if ($q != "") {
    $q = strtolower($q);
    $len=strlen($q);
    foreach($a as $name) {
        if (striestr($q, substr($name, 0, $len))) {
            if ($hint === "") {
                $hint = $name;
            } else {
                $hint .= ", $name";
            }
        }
    }
}

// Output "no suggestion" if no hint was found or output correct values
echo $hint === "" ? "no suggestion" : $hint;
?>
```