

Demo-Programme

Parameterübergabe an PHP

Testseite für HTML-Parameter-Übergabe (Datei get_param_test.html)

```
<!doctype html public "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<title>Testseite f&uuml;r HTML-Parameter-&Uuml;bergabe</title>
<meta name="Generator" content="EditPlus">
<meta name="Author" content="Karl Riedling">
<meta name="Keywords" content="">
<meta name="Description" content="">
</head>

<body>
<h1>Testseite f&uuml;r HTML-Parameter-&Uuml;bergabe<br>50 Parameter werden
übergeben</h1>

<a
href="parstest.php?f01=Feld+01&f02=Feld+02&f03=Feld+03&f04=Feld+04&f05=Feld+05&f06=
Feld+06&f07=Feld+07&f08=Feld+08&f09=Feld+09&f10=Feld+10&f11=Feld+11&f12=Feld+12&f13
=Feld+13&f14=Feld+14&f15=Feld+15&f16=Feld+16&f17=Feld+17&f18=Feld+18&f19=Feld+19&f2
0=Feld+10&f21=Feld+21&f22=Feld+22&f23=Feld+23&f24=Feld+24&f25=Feld+25&f26=Feld+26&f
27=Feld+27&f28=Feld+28&f29=Feld+29&f30=Feld+30&f31=Feld+31&f32=Feld+32&f33=Feld+33&
f34=Feld+34&f35=Feld+35&f36=Feld+36&f37=Feld+37&f38=Feld+38&f39=Feld+39&f40=Feld+40
&f41=Feld+41&f42=Feld+42&f43=Feld+43&f44=Feld+44&f45=Feld+45&f46=Feld+46&f47=Feld+4
7&f48=Feld+48&f49=Feld+49&f50=Feld+50"><h3>Parameter als URL
&uuml;bergeben:</h3></a><br>
<a
href="parstest.php?f01=Feld+01&f02=Feld+02&f03=Feld+03&f04=Feld+04&f05=Feld+05&f06=
Feld+06&f07=Feld+07&f08=Feld+08&f09=Feld+09&f10=Feld+10&f11=Feld+11&f12=Feld+12&f13
=Feld+13&f14=Feld+14&f15=Feld+15&f16=Feld+16&f17=Feld+17&f18=Feld+18&f19=Feld+19&f2
0=Feld+10&f21=Feld+21&f22=Feld+22&f23=Feld+23&f24=Feld+24&f25=Feld+25&f26=Feld+26&f
27=Feld+27&f28=Feld+28&f29=Feld+29&f30=Feld+30&f31=Feld+31&f32=Feld+32&f33=Feld+33&
f34=Feld+34&f35=Feld+35&f36=Feld+36&f37=Feld+37&f38=Feld+38&f39=Feld+39&f40=Feld+40
&f41=Feld+41&f42=Feld+42&f43=Feld+43&f44=Feld+44&f45=Feld+45&f46=Feld+46&f47=Feld+4
7&f48=Feld+48&f49=Feld+49&f50=Feld+50">parstest.php?f01=Feld+01&f02=Feld+02&f03=Fe
ld+03&f04=Feld+04&f05=Feld+05&f06=Feld+06&f07=Feld+07&f08=Feld+08&f09=Feld+09&f10=Fe
ld+10&f11=Feld+11&f12=Feld+12&f13=Feld+13&f14=Feld+14&f15=Feld+15&f16=Feld+16&f17=F
eld+17&f18=Feld+18&f19=Feld+19&f20=Feld+10&f21=Feld+21&f22=Feld+22&f23=Feld+23&f24=
Feld+24&f25=Feld+25&f26=Feld+26&f27=Feld+27&f28=Feld+28&f29=Feld+29&f30=Feld+30&f31
=Feld+31&f32=Feld+32&f33=Feld+33&f34=Feld+34&f35=Feld+35&f36=Feld+36&f37=Feld+37&f3
8=Feld+38&f39=Feld+39&f40=Feld+40&f41=Feld+41&f42=Feld+42&f43=Feld+43&f44=Feld+44&f
45=Feld+45&f46=Feld+46&f47=Feld+47&f48=Feld+48&f49=Feld+49&f50=Feld+50</a><br><br>
<a
href="parstest.php?f01=Feld+01&amp;f02=Feld+02&amp;f03=Feld+03&amp;f04=Feld+04&amp;
f05=Feld+05&amp;f06=Feld+06&amp;f07=Feld+07&amp;f08=Feld+08&amp;f09=Feld+09&amp;f10
=Feld+10&amp;f11=Feld+11&amp;f12=Feld+12&amp;f13=Feld+13&amp;f14=Feld+14&amp;f15=Fe
ld+15&amp;f16=Feld+16&amp;f17=Feld+17&amp;f18=Feld+18&amp;f19=Feld+19&amp;f20=Feld+
10&amp;f21=Feld+21&amp;f22=Feld+22&amp;f23=Feld+23&amp;f24=Feld+24&amp;f25=Feld+25&
;amp;f26=Feld+26&amp;f27=Feld+27&amp;f28=Feld+28&amp;f29=Feld+29&amp;f30=Feld+30&amp
;f31=Feld+31&amp;f32=Feld+32&amp;f33=Feld+33&amp;f34=Feld+34&amp;f35=Feld+35&amp;f3
6=Feld+36&amp;f37=Feld+37&amp;f38=Feld+38&amp;f39=Feld+39&amp;f40=Feld+40&amp;f41=F
eld+41&amp;f42=Feld+42&amp;f43=Feld+43&amp;f44=Feld+44&amp;f45=Feld+45&amp;f46=Feld
+46&amp;f47=Feld+47&amp;f48=Feld+48&amp;f49=Feld+49&amp;f50=Feld+50"><h3>Parameter
als URL &uuml;bergeben (alternative Notation: &amp; statt &amp;):</h3></a><br>
```

parstest.php?f01=Feld+01&f02=Feld+02&f03=Feld+03&f04=Feld+04&f05=Feld+05&f06=Feld+06&f07=Feld+07&f08=Feld+08&f09=Feld+09&f10=Feld+10&f11=Feld+11&f12=Feld+12&f13=Feld+13&f14=Feld+14&f15=Feld+15&f16=Feld+16&f17=Feld+17&f18=Feld+18&f19=Feld+19&f20=Feld+10&f21=Feld+21&f22=Feld+22&f23=Feld+23&f24=Feld+24&f25=Feld+25&f26=Feld+26&f27=Feld+27&f28=Feld+28&f29=Feld+29&f30=Feld+30&f31=Feld+31&f32=Feld+32&f33=Feld+33&f34=Feld+34&f35=Feld+35&f36=Feld+36&f37=Feld+37&f38=Feld+38&f39=Feld+39&f40=Feld+40&f41=Feld+41&f42=Feld+42&f43=Feld+43&f44=Feld+44&f45=Feld+45&f46=Feld+46&f47=Feld+47&f48=Feld+48&f49=Feld+49&f50=Feld+50

<form action="parstest.php" method="get">

<h3>Parameter in Formular (mit Methode GET) übergeben</h3>

<input type="text" name="f01" value="Feld 01">

<input type="text" name="f02" value="Feld 02">

<input type="text" name="f03" value="Feld 03">

<input type="text" name="f04" value="Feld 04">

<input type="text" name="f05" value="Feld 05">

<input type="text" name="f06" value="Feld 06">

<input type="text" name="f07" value="Feld 07">

<input type="text" name="f08" value="Feld 08">

<input type="text" name="f09" value="Feld 09">

<input type="text" name="f10" value="Feld 10">

<input type="text" name="f11" value="Feld 11">

<input type="text" name="f12" value="Feld 12">

<input type="text" name="f13" value="Feld 13">

<input type="text" name="f14" value="Feld 14">

<input type="text" name="f15" value="Feld 15">

<input type="text" name="f16" value="Feld 16">

<input type="text" name="f17" value="Feld 17">

<input type="text" name="f18" value="Feld 18">

<input type="text" name="f19" value="Feld 19">

<input type="text" name="f20" value="Feld 10">

<input type="text" name="f21" value="Feld 21">

<input type="text" name="f22" value="Feld 22">

<input type="text" name="f23" value="Feld 23">

<input type="text" name="f24" value="Feld 24">

<input type="text" name="f25" value="Feld 25">

<input type="text" name="f26" value="Feld 26">

<input type="text" name="f27" value="Feld 27">

<input type="text" name="f28" value="Feld 28">

<input type="text" name="f29" value="Feld 29">

<input type="text" name="f30" value="Feld 30">

<input type="text" name="f31" value="Feld 31">

<input type="text" name="f32" value="Feld 32">

<input type="text" name="f33" value="Feld 33">

<input type="text" name="f34" value="Feld 34">

<input type="text" name="f35" value="Feld 35">

<input type="text" name="f36" value="Feld 36">

<input type="text" name="f37" value="Feld 37">

<input type="text" name="f38" value="Feld 38">

<input type="text" name="f39" value="Feld 39">

<input type="text" name="f40" value="Feld 40">


```

<input type="text" name="f41" value="Feld 41"><br>
<input type="text" name="f42" value="Feld 42"><br>
<input type="text" name="f43" value="Feld 43"><br>
<input type="text" name="f44" value="Feld 44"><br>
<input type="text" name="f45" value="Feld 45"><br>
<input type="text" name="f46" value="Feld 46"><br>
<input type="text" name="f47" value="Feld 47"><br>
<input type="text" name="f48" value="Feld 48"><br>
<input type="text" name="f49" value="Feld 49"><br>
<input type="text" name="f50" value="Feld 50"><br>

<input type="submit" name="submitButton" value="Abschicken"><br>
</form>

</body>
</html>

```

Quellcode der von der obigen Seite aufgerufenen Datei parstest.php

```

<!doctype html public "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<title>PHP-Parameter&uuml;bergabe-Testseite</title>
<meta name="Generator" content="EditPlus">
<meta name="Author" content="">
<meta name="Keywords" content="">
<meta name="Description" content="">
</head>

<body>
<h1>&Uuml;bergabene Daten:</h1>

<?php
for ($i = 0; $i < 50; $i++)
{
    $fname = ($i + 1);

    if ($i < 9)
        $fname = "0".$fname;

    $fname = "f".$fname;

    echo "\$_GET[$fname] = ".$_GET[$fname];

    if ($_GET[$fname] === NULL)
        echo "NULL";

    if ($_GET[$fname] === "")
        echo "(leerer String)";

    echo "<br>\n";
}
?>
</body>
</html>

```

Formulare und PHP

Formular ohne Angabe eines "method"-Attributs (Datei formtest_none.html)

Formular mit "method=POST" (Datei formtest_post.html)

Formular mit "method=GET" (Datei formtest_get.html)

Der HTML-Code dieser drei Formulare unterscheidet sich nur durch die Attribute des <form>-Tags in Zeile 15 der Dateien. Stellvertretend für alle drei Dateien sei hier die Datei formtest_post.html wiedergegeben:

```
<!doctype html public "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<title>HTML-Formular-Testseite - POST</title>
<meta name="Generator" content="EditPlus">
<meta name="Author" content="Karl Riedling">
<meta name="Keywords" content="">
<meta name="Description" content="">
</head>

<body>

<h1>Testseite f&uuml;r Formular-Elemente - Methode: POST</h1>

<form action="formtest.php" method="post">

Textfeld:<br>
<input type="text" name="textfeld" value="Textfeld" size="20"
maxlength="32"><br><br>

Passwort:<br>
<input type="password" name="passwort" value="topsecret" size="20"
maxlength="16"><br><br>

<i>Radio Buttons</i>:<br>
<input type="radio" name="radiobutton" value="eins" checked>&nbsp;&nbsp;&nbsp;Option 1
<input type="radio" name="radiobutton" value="zwei">&nbsp;&nbsp;&nbsp;Option 2
<input type="radio" name="radiobutton" value="drei">&nbsp;&nbsp;&nbsp;Option 3<br><br>

<i>Checkbox</i>:<br>
<input type="checkbox" name="box1" value="gesetzt">&nbsp;&nbsp;&nbsp;Checkbox mit
&quot;value&quot;-Attribut<br>
<input type="checkbox" name="box2" checked>&nbsp;&nbsp;&nbsp;Checkbox ohne &quot;value&quot;-
Attribut<br><br>

Verborgenes Feld:<br>
<input type="hidden" name="versteckt" value="unsichtbar"><br>

Textbereich:<br>
<textarea name="textbereich" cols="50" rows="5" wrap="virtual">
Das ist der voreingestellte Text in einem Textbereich.
Es kann Text bis zu max. 30.000 Bytes (Netscape 4.x) bzw. mit unbegrenzter Länge
(IE6, Mozilla) hier eingefügt werden.</textarea><br><br>

Auswahllisten - einfache Auswahl:<br>
<select name="listel" size="1">
<option value="0">Option Nr. 1</option>
<option value="1" selected>Option Nr. 2</option>
<option value="2">Option Nr. 3</option>
```

Formular für Datei-Upload (Datei formtest file.html)

Quellcode der von den obigen vier Formularen aufgerufenen Datei `form-test.php`

```
<!doctype html public "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<title>PHP-Parameter&uuml;bergabe-Testseite</title>
<meta name="Generator" content="EditPlus">
<meta name="Author" content="Karl Riedling">
<meta name="Keywords" content="">
<meta name="Description" content="">
</head>

<body>
<h1>&Uuml;bergebene Daten:</h1>

<?php

if (sizeof ($_POST))          // $_POST[]-Array hat Elemente
{
    echo "<h2>Daten aus POST-Operation (mit &quot;\$_POST&quot;):</h2>\n";

    foreach ($_POST as $key => $value)
        echo "\$_POST[$key] = $value<br>\n";
}

if (sizeof ($_GET))           // $_GET[]-Array hat Elemente
{
    echo "<h2>Daten aus GET-Operation (mit &quot;\$_GET&quot;):</h2>\n";

    foreach ($_GET as $key => $value)
        echo "\$_GET[$key] = $value<br>\n";
}

if (sizeof ($_REQUEST))       // $_REQUEST[]-Array hat Elemente
{
    echo "<h2>Daten aus POST- oder GET-Operation (mit
    &quot;\$_REQUEST&quot;):</h2>\n";

    foreach ($_REQUEST as $key => $value)
        echo "\$_REQUEST[$key] = $value<br>\n";
}

if (sizeof ($_FILES))         // $_FILES[]-Array hat Elemente
{
    echo "<h2>Daten aus Datei-Upload-Operation (mit &quot;\$_FILES&quot;):</h2>\n";

    foreach ($_FILES as $key => $value)
    {
        echo "\$_FILES[$key] = $value<br>\n";

        foreach ($value as $key1 => $value1)
            echo "\$_FILES[$key][$key1] = $value1<br>\n";
    }
}

echo "<h2>Formulardaten aufgeschl&uuml;sselt</h2>\n";

echo "Textfeld (\$textfield): *".$_REQUEST['textfield']."*";

if ($_REQUEST['textfield'] === NULL) echo " ist NULL";
if ($_REQUEST['textfield'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "Passwort (\$password): *".$_REQUEST['password']."*";

if ($_REQUEST['password'] === NULL) echo " ist NULL";
```

```

if ($_REQUEST['passwort'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "<i>Radio Buttons</i> (\$radiobutton): *".$_REQUEST['radiobutton'].***";

if ($_REQUEST['radiobutton'] === NULL) echo " ist NULL";
if ($_REQUEST['radiobutton'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "Checkbox (\$box1): *".$_REQUEST['box1'].***";

if ($_REQUEST['box1'] === NULL) echo " ist NULL";
if ($_REQUEST['box1'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "Checkbox (\$box2): *".$_REQUEST['box2'].***";

if ($_REQUEST['box2'] === NULL) echo " ist NULL";
if ($_REQUEST['box2'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "Verborgenes Feld (\$versteckt): *".$_REQUEST['versteckt'].***";

if ($_REQUEST['versteckt'] === NULL) echo " ist NULL";
if ($_REQUEST['versteckt'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "Textbereich (\$textbereich): *".$_REQUEST['textbereich'].***";

if ($_REQUEST['textbereich'] === NULL) echo " ist NULL";
if ($_REQUEST['textbereich'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "Auswahlliste 1 (Klappliste) (\$liste1): *".$_REQUEST['liste1'].***<br><br>\n";
echo "Auswahlliste 2 (\$liste2): *".$_REQUEST['liste2'].***<br><br>\n";

echo "Mehrfachauswahl:<br>\n";

if ($_REQUEST['liste'] !== NULL)
    foreach ($_REQUEST['liste'] as $key => $val)
        echo "\$liste[$key] = $val<br>\n";
else
    echo "\$liste ist NULL!<br>\n";

echo "<br><br>Abschicken (\$submitbutton): *".$_REQUEST['submitbutton'].***";

if ($_REQUEST['submitbutton'] === NULL) echo " ist NULL";
if ($_REQUEST['submitbutton'] === "") echo " ist leerer String";

echo "<br><br>\n";

echo "Alt. Abschicken (\$submitbutton1): *".$_REQUEST['submitbutton1'].***";

if ($_REQUEST['submitbutton1'] === NULL) echo " ist NULL";
if ($_REQUEST['submitbutton1'] === "") echo " ist leerer String";

echo "<br><br>\n";

?>
</body>
</html>

```

JavaScript

Demo-Programm für den Zugriff auf Formular-Elemente und für *Event Handler* (Datei `FormElements.html`)

```
<!doctype html public "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<title>JavaScript Form Element Test</title>
<meta name="Generator" content="EditPlus">
<meta name="Author" content="David Flanagan, Karl Riedling">
<meta name="Keywords" content="">
<meta name="Description" content="JavaScript Operations on Form Elements: This page
was originally written by David Flanagan and adapted by Karl Riedling">
</head>

<body>

<h1 align="center">JavaScript Form Element Handling</h1>

<div align="center">
  <form name="everything" onsubmit="alert ('Form would be submitted now but is not
  because we return `false`'); return false;" onreset="alert ('Form will be reset
  now');">
    <table border cellpadding="5">
      <tr>
        <td>Username:<br>[1] <input type="text" name="username"
        size="15"></td>
        <td>Password:<br>[2] <input type="password" name="password"
        size="15"></td>
        <td rowspan="4">Input Events [3]<br>
          <textarea name="textarea" rows="20" cols="48"></textarea>
        </td>
        <td rowspan="4" align="center" valign="center">
          [9] <input type="button" value="Clear" name="clearbutton"><br>
          [10] <input type="submit" value="Submit"
          name="submitbutton"><br>
          [11] <input type="reset" value="Reset" name="resetbutton">
        </td>
      </tr>
      <tr>
        <td colspan="2">Filename: [4]<input type="file" name="file"
        size="15"></td>
      </tr>
      <tr>
        <td>My Computer Peripherals:<br>
          [5] <input type="checkbox" name="peripherals1" value="modem">56K
          Modem<br>
          [5] <input type="checkbox" name="peripherals2"
          value="printer">Laser Printer<br>
          [5] <input type="checkbox" name="peripherals3"
          value="firewall">Hardware Firewall
        </td>
      </tr>
      <tr>
        <td>My Web Browser:<br>
          [6] <input type="radio" name="browser" value="nn">Netscape
          Navigator<br>
          [6] <input type="radio" name="browser" value="ie">Internet
          Explorer<br>
          [6] <input type="radio" name="browser" value="other">Other
        </td>
      </tr>
      <tr>
        <td>My Hobbies [7]:<br>
          <select multiple name="hobbies" size="4">
            <option value="programming">Fighting Web Forms</option>
            <option value="surfing">Surfing the Web</option>
```



```

        <option value="caffeine">Drinking Coffee</option>
        <option value="annoying">Annoying People</option>
    </select>
</td align="center" valign="center">
<td>My Favourite Colour:<br>[8]
    <select name="color">
        <option value="red">Red</option>
        <option value="green">Green</option>
        <option value="blue">Blue</option>
        <option value="white">White</option>
        <option value="violet">Violet</option>
        <option value="pink">Pink</option>
    </select>
</td>
</tr>
</table>

    <input type="checkbox" name="showprop"> Show properties of form element when
    it gets the focus
</form>
</div>

<div align="center">
    <table border="4" bgcolor="pink" cellspacing="1" cellpadding="4">
        <tr>
            <td align="center"><b>Form Elements:</b></td>
            <td>[1] Text</td> <td>[2] Password </td> <td>[3] Textarea</td> <td>[4]
            File Upload</td> <td>[5] Checkbox</td>
        </tr>
        <tr>
            <td>[6] Radio</td> <td>[7] Select (list)</td> <td>[8] Select (menu)</td>
            <td>[9] Button</td> <td>[10] Submit </td>
            <td>[11] Reset</td>
        </tr>
    </table>
</div>

<script language="JavaScript1.1">

// This function is called from each event handler in this program. It appends the
// details of the current event to a Textarea element in the form. The first
// argument of this function is always "this", which resolves to the current
// object, i.e., the form element. The second argument holds a string which
// specifies the type of the event.

function report (element, event)
{
    var t = element.form.textarea;
    var elmtname = element.name;

    // special treatment for <select> form elements

    if (element.type == "select-one" || element.type == "select-multiple")
    {
        // we enumerate all selected options

        value = " ";
        for (var i = 0; i < element.options.length; i++)
            if (element.options[i].selected)
                value += element.options[i].value + " ";
    }

    else
        if (element.type == "textarea")
            value = "...";

        else
            value = element.value;

    var msg = "";

```

```

// special handling of onFocus events if the "Show Properties" checkbox is
// active: enumerate all properties with their names (x) and values (element[x])

if (event == "Focus" && element.form.showprop.checked == true)
{
    msg += "\n*****\n\n";
    msg += "Properties of Form Element " + elmtname + ":\n\n";

    for (var x in element)
        msg += "    " + x + " = " + element[x] + "\n";

    msg += "\n*****\n\n";
}

msg += event + ": " + elmtname + " (" + value + ")\n";

t.value = t.value + msg;
}

// Function addhandlers() adds all event handlers potentially relevant to form
// elements to each form element on this page, regardless of whether the event
// handler makes sense for the particular form element

function addhandlers (f)
{
    var click_handler = new Function ("report (this, 'Click')");
    var change_handler = new Function ("report (this, 'Change')");
    var focus_handler = new Function ("report (this, 'Focus')");
    var blur_handler = new Function ("report (this, 'Blur')");
    var select_handler = new Function ("report (this, 'Select')");

    for (var i = 0; i < f.elements.length; i++)
    {
        var e = f.elements[i];

        e.onclick = click_handler;
        e.onchange = change_handler;
        e.onfocus = focus_handler;
        e.onblur = blur_handler;
        e.onselect = select_handler;
    }

    f.clearbutton.onclick = new Function ("this.form.textarea.value=''; report
    (this, 'Click')");

    f.submitbutton.onclick = new Function ("showcontents(); report (this,
    'Click')");
}

// Function showcontents() displays those properties of all form elements which
// hold information pertinent to form programming, e.g., "value" or "checked"

function showcontents()
{
    var rep = "";
    var f = document.everything;

    rep += "Username: value = " + f.username.value + "*\n";
    rep += "Password: value = " + f.password.value + "*\n";
    rep += "\n";
    rep += "Input Events: value = " + f.textarea.value.substr(0, 16) + "...*\n";
    rep += "\n";
    rep += "Filename: value = " + f.file.value + "*\n";
    rep += "\n";
    rep += "Peripherals 1: value = " + f.peripherals1.value + "*, checked = " +
    f.peripherals1.checked + "*\n";
    rep += "Peripherals 2: value = " + f.peripherals2.value + "*, checked = " +
    f.peripherals2.checked + "*\n";
}

```

```

    rep += "Peripherals 3: value = *" + f.peripherals3.value + "*, checked = *" +
    f.peripherals3.checked + "*\n";
    rep += "\n";

    for (var i = 0; i < f.browser.length; i++)
        rep += "Browser "+ i + ": value = *" + f.browser[i].value + "*, checked = *"
        + f.browser[i].checked + "*\n";

    rep += "\n";
    rep += "Hobbies: selectedIndex = *" + f.hobbies.selectedIndex + "*\n";

    for (var i = 0; i < f.hobbies.length; i++)
        rep += "Hobbies ["+ i + "]: value = *" + f.hobbies[i].value + "*, text = *"
        + f.hobbies[i].text + "*, selected = *" + f.hobbies[i].selected + "*\n";

    rep += "\n";
    rep += "Color: selectedIndex = *" + f.color.selectedIndex + "*\n";

    for (var i = 0; i < f.color.length; i++)
        rep += "Color ["+ i + "]: value = *" + f.color[i].value + "*, text = *" +
        f.color[i].text + "*, selected = *" + f.color[i].selected + "*\n";

    alert (rep);

    return false;
}

// This statement is executed when this page is being loaded; it adds the event
handlers to the form elements

addhandlers (document.everything);

</script>

</body>
</html>

```

Demo-Programm für den Zugriff auf Formular-Elemente und für Tastatur-Events (Datei KeyEventTest.html)

```

<!doctype html public "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<title>JavaScript Form Element Test</title>
<meta name="Generator" content="EditPlus">
<meta name="Author" content="David Flanagan, Karl Riedling">
<meta name="Keywords" content="">
<meta name="Description" content="JavaScript Operations on Form Elements: This page
was originally written by David Flanagan and adapted by Karl Riedling">
</head>

<body>

<h1 align="center">JavaScript Form Element Handling - Also Shows Key Events</h1>

<div align="center">
    <form name="everything" onsubmit="alert ('Form would be submitted now but is not
    because we return `false`'); return false;" onreset="alert ('Form will be reset
    now');">
        <table border cellpadding="5">
            <tr>
                <td>Username:<br>[1] <input type="text" name="username"
                size="15"></td>
                <td>Password:<br>[2] <input type="password" name="password"
                size="15"></td>
                <td rowspan="4">Input Events [3]<br>
                <textarea name="textarea" rows="20" cols="48"></td>
            </tr>

```

```

        </td>
        <td rowspan="4" align="center" valign="center">
          [9] <input type="button" value="Clear" name="clearbutton"><br>
          [10] <input type="submit" value="Submit"
              name="submitbutton"><br>
          [11] <input type="reset" value="Reset" name="resetbutton">
        </td>
      </tr>
      <tr>
        <td colspan="2">Filename: [4]<input type="file" name="file"
            size="15"></td>
      </tr>
      <tr>
        <td>My Computer Peripherals:<br>
          [5] <input type="checkbox" name="peripherals1" value="modem">56K
              Modem<br>
          [5] <input type="checkbox" name="peripherals2"
              value="printer">Laser Printer<br>
          [5] <input type="checkbox" name="peripherals3"
              value="firewall">Hardware Firewall
        </td>
        <td>My Web Browser:<br>
          [6] <input type="radio" name="browser" value="nn">Netscape
              Navigator<br>
          [6] <input type="radio" name="browser" value="ie">Internet
              Explorer<br>
          [6] <input type="radio" name="browser" value="other">Other
        </td>
      </tr>
      <tr>
        <td>My Hobbies [7]:<br>
          <select multiple name="hobbies" size="4">
            <option value="programming">Fighting Web Forms</option>
            <option value="surfing">Surfing the Web</option>
            <option value="caffeine">Drinking Coffee</option>
            <option value="annoying">Annoying People</option>
          </select>
        </td align="center" valign="center">
        <td>My Favourite Colour:<br>[8]
          <select name="color">
            <option value="red">Red</option>
            <option value="green">Green</option>
            <option value="blue">Blue</option>
            <option value="white">White</option>
            <option value="violet">Violet</option>
            <option value="pink">Pink</option>
          </select>
        </td>
      </tr>
    </table>

    <input type="checkbox" name="showprop"> Show properties of form element when
    it gets the focus
  </form>
</div>

<div align="center">
  <table border="4" bgcolor="pink" cellspacing="1" cellpadding="4">
    <tr>
      <td align="center"><b>Form Elements:</b></td>
      <td>[1] Text</td> <td>[2] Password </td> <td>[3] Textarea</td> <td>[4]
          File Upload</td> <td>[5] Checkbox</td>
    </tr>
    <tr>
      <td>[6] Radio</td> <td>[7] Select (list)</td> <td>[8] Select (menu)</td>
      <td>[9] Button</td> <td>[10] Submit </td>
      <td>[11] Reset</td>
    </tr>
  </table>
</div>

```

```

<script language="JavaScript">

// This function is called from each event handler in this program. It appends the
// details of the current event to a Textarea element in the form. The first
// argument of this function is always "this", which resolves to the current
// object, i.e., the form element. The second argument holds a string which
// specifies the type of the event.

function report (element, event)
{
    var t = element.form.textarea;
    var elmtname = element.name;

    // special treatment for <select> form elements

    if (element.type == "select-one" || element.type == "select-multiple")
    {
        // we enumerate all selected options

        value = " ";
        for (var i = 0; i < element.options.length; i++)
            if (element.options[i].selected)
                value += element.options[i].value + " ";
    }

    else
        if (element.type == "textarea")
            value = "...";

        else
            value = element.value;

    var msg = "";

    // special handling of onFocus events if the "Show Properties" checkbox is
    // active: enumerate all properties with their names (x) and values (element[x])

    if (event == "Focus" && element.form.showprop.checked == true)
    {
        msg += "\n*****\n\n";
        msg += "Properties of Form Element " + elmtname + ":\n\n";

        for (var x in element)
            msg += "    " + x + " = " + element[x] + "\n";

        msg += "\n*****\n\n";
    }

    msg += event + ": " + elmtname + " (" + value + ")\n";

    t.value = t.value + msg;
}

// Function addhandlers() adds all event handlers potentially relevant to form
// elements to each form element on this page, regardless of whether the event
// handler makes sense for the particular form element

function addhandlers (f)
{
    var click_handler = new Function ("report (this, 'Click')");
    var change_handler = new Function ("report (this, 'Change')");
    var focus_handler = new Function ("report (this, 'Focus')");
    var blur_handler = new Function ("report (this, 'Blur')");
    var select_handler = new Function ("report (this, 'Select')");

    var keypress_handler = new Function ("report (this, 'KeyPress')");
    var keydown_handler = new Function ("report (this, 'KeyDown')");
    var keyup_handler = new Function ("report (this, 'KeyUp')");

```

```

for (var i = 0; i < f.elements.length; i++)
{
    var e = f.elements[i];

    e.onclick = click_handler;
    e.onchange = change_handler;
    e.onfocus = focus_handler;
    e.onblur = blur_handler;
    e.onselect = select_handler;

    e.onkeypress = keypress_handler;
    e.onkeydown = keydown_handler;
    e.onkeyup = keyup_handler;
}

f.clearbutton.onclick = new Function ("this.form.textarea.value=''; report
(this, 'Click')");

f.submitbutton.onclick = new Function ("showcontents(); report (this,
'Click')");
}

// Function showcontents() displays those properties of all form elements which
// hold information pertinent to form programming, e.g., "value" or "checked"

function showcontents()
{
    var rep = "";
    var f = document.everything;

    rep += "Username: value = *" + f.username.value + "*\n";
    rep += "Password: value = *" + f.password.value + "*\n";
    rep += "\n";
    rep += "Input Events: value = *" + f.textarea.value.substr(0, 16) + "...*\n";
    rep += "\n";
    rep += "Filename: value = *" + f.file.value + "*\n";
    rep += "\n";
    rep += "Peripherals 1: value = *" + f.peripherals1.value + "*", checked = *" +
f.peripherals1.checked + "*\n";
    rep += "Peripherals 2: value = *" + f.peripherals2.value + "*", checked = *" +
f.peripherals2.checked + "*\n";
    rep += "Peripherals 3: value = *" + f.peripherals3.value + "*", checked = *" +
f.peripherals3.checked + "*\n";
    rep += "\n";

    for (var i = 0; i < f.browser.length; i++)
        rep += "Browser "+ i + ": value = *" + f.browser[i].value + "*", checked = *"
        + f.browser[i].checked + "*\n";

    rep += "\n";
    rep += "Hobbies: selectedIndex = *" + f.hobbies.selectedIndex + "*\n";

    for (var i = 0; i < f.hobbies.length; i++)
        rep += "Hobbies ["+ i + "]: value = *" + f.hobbies[i].value + "*", text = *"
        + f.hobbies[i].text + "*", selected = *" + f.hobbies[i].selected + "*\n";

    rep += "\n";
    rep += "Color: selectedIndex = *" + f.color.selectedIndex + "*\n";

    for (var i = 0; i < f.color.length; i++)
        rep += "Color ["+ i + "]: value = *" + f.color[i].value + "*", text = *" +
        f.color[i].text + "*", selected = *" + f.color[i].selected + "*\n";

    alert (rep);

    return false;
}

// This statement is executed when this page is being loaded; it adds the event
handlers to the form elements

```

```
addhandlers (document.everything);
```

```
</script>
```

```
</body>
```

```
</html>
```