

Internet i veb tehnologije

Java script – Rad sa događajima



Dr Nenad Kojić
Dr Dragoslav Danilović

Događaji

- Događaji definišu način, vreme i mesto obavljanja neke od operacija

onAbort – prekid učitavanje slike

onBlur – izlazak iz fokusa elemenata obrasca, prozora ili forme

onClick – klik mišem

onChange – promena vrednosti u obrascu

onError – greška pri učitavanju

onFocus – davanje ulaznog fokusa prozoru

onLoad – učitavanje web stranice

onMouseout – pomeranje miša van aktivnog dela linka

onMouseOver – pomeranje miša u aktivnom delu linka

onReset – aktiviranje tastera reset u obrascu

onSelect – aktiviranje polja za unos u obrascu

onSubmit – aktiviranje tastera submit u obrascu

onUnload – napuštanje web strane

onKeyUp – trenutak otpuštanja tastera na tastaturi

Događaji

Event	Description
onAbort	An image failed to load.
onBeforeUnload	The user is navigating away from a page.
onBlur	A form field lost the focus (User moved to another field)
onChange	The contents of a field has changed.
onClick	User clicked on this item.
onDbClick	User double-clicked on this item.
onError	An error occurred while loading an image.
onFocus	User just moved into this form element.
onKeyDown	A key was pressed.
onKeyPress	A key was pressed OR released.
onKeyUp	A key was released.
onLoad	This object (iframe, image, script) finished loading.
onMouseDown	A mouse button was pressed.
onMouseMove	The mouse moved.
onMouseOut	A mouse moved off of this element.
onMouseOver	The mouse moved over this element.
onMouseUp	The mouse button was released.
onReset	A form reset button was pressed.
onResize	The window or frame was resized.
onSelect	Text has been selected.
onSubmit	A form's Submit button has been pressed.
onUnload	The user is navigating away from a page.

Događaji i tagovi kojima se mogu dodeliti

EVENT HANDLER	USED WITH
<u>onAbort</u>	image
<u>onBlur</u>	select, text, text area
<u>onChange</u>	select, text, textarea
<u>onClick</u>	button, checkbox, radio, link, reset, submit, area
<u>onError</u>	image
<u>onFocus</u>	select, text, textarea
<u>onLoad</u>	windows, image
<u>onMouseOut</u>	link, area
<u>onMouseOver</u>	link, area
<u>onSelect</u>	text, textarea
<u>onSubmit</u>	form
<u>onUnload</u>	window

- **<A>**
 - click (onClick)
 - mouseOver (onMouseOver)
 - mouseOut (onMouseOut)
- **<AREA>**
 - mouseOver (onMouseOver)
 - mouseOut (onMouseOut)
- **<BODY>**
 - blur (onBlur)
 - error (onError)
 - focus (onFocus)
 - load (onLoad)
 - unload (onUnload)
- **<FORM>**
 - submit (onSubmit)
 - reset (onReset)
- ****
 - abort (onAbort)
 - error (onError)
 - load (onLoad)

- **<INPUT TYPE = "button">**
 - click (onClick)
- **<INPUT TYPE = "checkbox">**
 - click (onClick)
- **<INPUT TYPE = "reset">**
 - click (onClick)
- **<INPUT TYPE = "submit">**
 - click (onClick)
- **<INPUT TYPE = "text">**
 - blur (onBlur)
 - focus (onFocus)
 - change (onChange)
 - select (onSelect)
- **<SELECT>**
 - blur (onBlur)
 - focus (onFocus)
 - change (onChange)
- **<TEXTAREA>**
 - blur (onBlur)
 - focus (onFocus)
 - change (onChange)
 - select (onSelect)

Primer- onAbort

```
<HTML>
```

```
<BODY>
```

```
<H4>Primer onAbort </H4>
```

```
<b>Zaustavite učitavanje slike !</b>
```

```
<p> 
```

```
</BODY>
```

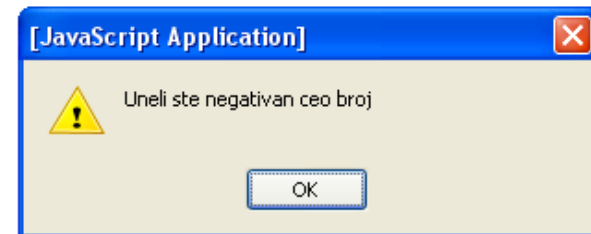
```
</HTML>
```



Primer- onBlur

Primer onBlur

Ako unesete negativan broj pojava ALERT dijaloga:



```
<HEAD>
```

```
<SCRIPT LANGUAGE="JavaScript">
```

```
function valid(){  
    var input=0;  
    input=document.myform.podatak.value;  
    if (input<0){ alert("Uneli ste negativan ceo broj"); } }  
</SCRIPT> </HEAD>
```

```
<BODY>
```

```
<H4> Primer onBlur </H4>
```

Ako unesete negativan broj pojava ALERT dijaloga:


```
<form name="myform">
```

```
    <input type="text" name="podatak" value="" onBlur="valid()">
```

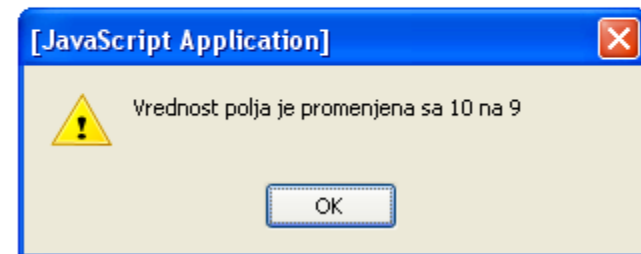
```
</form>
```

```
</BODY>
```


Primer- onChange

Primer

Promenite vrednost polja sa 10 na neku drugu i pratite desavanja:



```
<HEAD>
<SCRIPT LANGUAGE="JavaScript">
function valid(){
    var input=0;
    input=document.myform.podatak.value;
    alert("Vrednost polja je promenjena sa 10 na " + input ); }
</SCRIPT>
</HEAD>
```

```
<BODY> <H4>Primer</H4>
```

Promenite vrednost polja sa 10 na neku drugu i pratite desavanja:


```
<form name="myform">
```

```
<input type="text" name="podatak" value="10" onChange="valid()" />
```

```
</form>
```

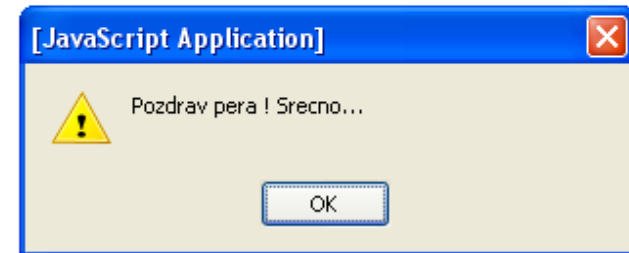
```
</BODY>
```


Primer- onClick

```
<HEAD>
<SCRIPT LANGUAGE="JavaScript">
function valid(){
    var input=0;
    input=document.myform.data.value;
    alert("Pozdrav " + input + " ! Srečno...");
}
</SCRIPT>
</HEAD>
<BODY>
<H4> Primer onClick </H4>
Kliknite na dugme nakon unosa imena u text polje:<br/>
<form name="myform">
    <input type="text" name="data" size=10 />
    <INPUT TYPE="button" VALUE="KLIKNITE" onClick="valid()">
</form>
</BODY>
```

Primer onClick

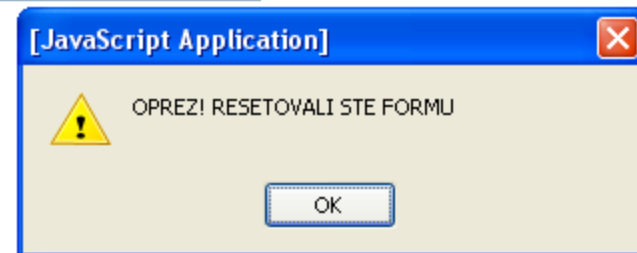
Kliknite na dugme nakon unosa imena u text polje:



Primer- onReset

Primer onReset

Molimo Vas, pounite text polje i kliknite na dugme reset:



```
<HTML>
<BODY>
<H4> Primer onReset </H4>
```

Molimo Vas, popunite text polje i kliknite na dugme reset:


```
<form name="myform" onReset="alert('OPREZ! RESETOVALI STE
FORMU')">
```

```
<input type="text" name="data" value="" size="20">
<input type="reset" Value="Reset" name="myreset">
```

```
</form>
```

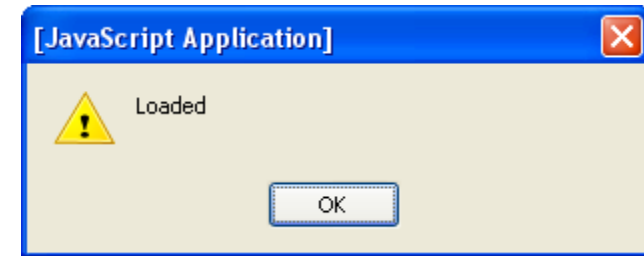
```
</BODY>
```

```
</HTML>
```

Primer- OnLoad

```
<html>
<head>
<SCRIPT TYPE="text/javascript" >
<!--
function imefunkcije()
    {
    alert("Loaded");
    alert("Stranica je učitana");
    }
//-->
</SCRIPT>
</head>

<body OnLoad="imefunkcije()" >
</body>
</html>
```



Primer- onmouseover i onmouseout

```
<a href="primer.html"  
onmouseover="document.images[1].src='slika1.gif';"  
onmouseout="document.images[1].src='slika2.gif';" >  
Link koji sada postaje osetljiv  
</a>
```

```
<a href="http://www.sajt.rs" onmouseover="nesto()"> Text </a>
```

- Kada korisnik pređe preko linka Text, aktiviraće se funkcija “nesto”

Stringovi - konverzija

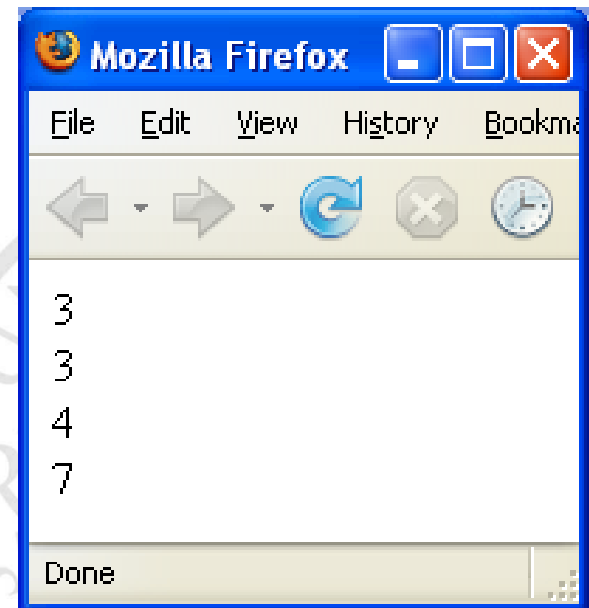
- Kada se iz tekstualnog polja preuzme neki podatak (koji je uvek inicijalno tekst) a koji treba da bude brojna vrednost, tada je neophodno izvršiti konverziju tog tipa podatka u integer
- Za to se koristi parseInt()
- Primer

```
var prvi_broj= parseInt (document.form.text1.value);  
var drugi_broj= parseInt (document.form.text2.value);  
zbir = prvi_broj + drugi_broj;  
document.write (zbir);
```

Eval

- Funkcija eval() izračunava vrednost datog izraza (izvršava ga kao da je napisan u script kodu)

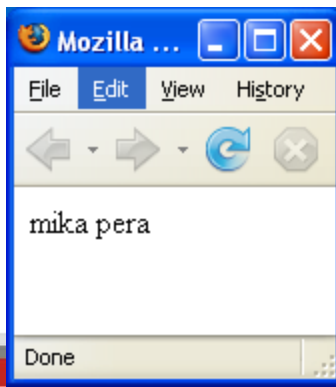
```
var a = 5;  
  
document.write(eval(1+2));  
document.write("<br>");  
  
document.write(eval("1+2"));  
document.write("<br>");  
  
eval ("c=1; d=3; document.write(c+d)");  
document.write("<br>");  
  
document.write(eval(a+2));  
document.write("<br>");
```



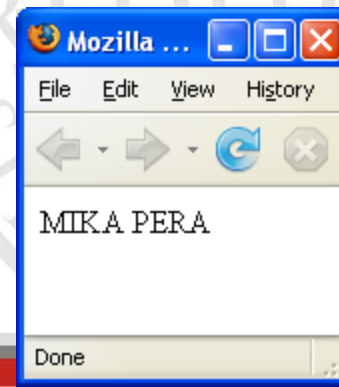
String - metodi

- Konverzija u velika (*.toUpperCase())
- Konverzija u mala slova (*.toLowerCase())
- Primer

```
<SCRIPT LANGUAGE="JavaScript">
var a="Pera";
var x = "Mika".toLowerCase() ;
var y = a.toLowerCase();
document.write(x + " " + y);
</SCRIPT>
```



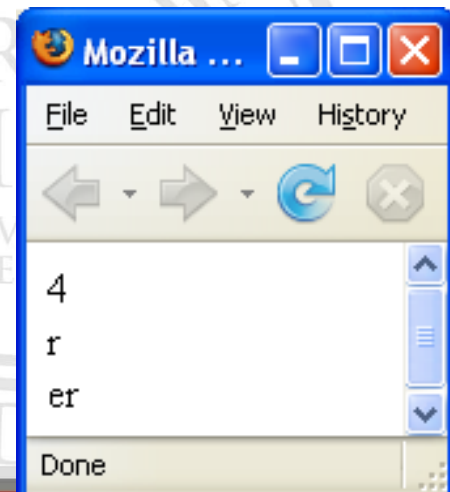
```
<SCRIPT LANGUAGE="JavaScript">
var a="Pera";
var x = "Mika".toUpperCase() ;
var y = a.toUpperCase();
document.write(x + " " + y);
</SCRIPT>
```



String - metodi

- Prebrojavanje broja karaktera (*.length)
- Dohvatanje karaktera na poziciji (*.charAt(x))
- Dohvatanje grupe karaktera od pozicije x do pozicije y (*.substring(x,y))
- Dohvatanje grupe karaktera od pozicije x, u dužini od y (*.substr(x,y))
- Primer

```
<SCRIPT LANGUAGE="JavaScript">
var a="Pera";
var x = a.length ;
var y = a.charAt(2);
var z = a.substring(1,3);
document.write(x + "<br> " + y+ " <br>" + z);
</SCRIPT>
```

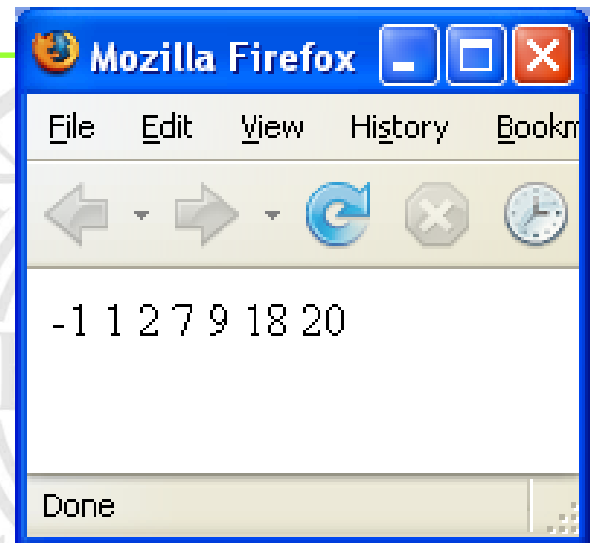


String - metodi

- Traženje prve pozicije nekog stringa (*.indexOf(string))
- Traženje poslednje pozicije nekog stringa (*.lastIndexOf(string))
- Traženje prve pozicije nekog stringa počev od zadate pozicije (*.indexOf(string, pozicija))
- Traženje poslednje pozicije nekog stringa počev od zadate pozicije (*.lastIndexOf(string, pozicija))

```
var a = "Pera ide rado u skolu";  
var x = a.indexOf("z") ;  
var y = a.indexOf("e") ;  
var z = a.indexOf("ra") ;  
  
var i = a.lastIndexOf("e") ;  
var j = a.lastIndexOf("ra") ;
```

```
var m = a.indexOf("o", 15) ;  
var n = a.lastIndexOf("u") ;  
document.write(x+" "+y+" "+z+" "+i+" "+j+" "+m+" "+n);
```



Matematičke funkcije

- **Math.random();** // vraća slučajni broj iz intervala [0-1)
 - Npr. 0.8257765207309270
- **Math.min()** i **Math.max()** pronalaze najmanji tj. najveći broj u listi argumenata:
- **Math.min(0, 150, 30, 20, -8, -200);** // returns -200
- **Math.max(0, 150, 30, 20, -8, -200);** // returns 150
- **Math.round()** vrši zaokruživanje broja na **najbliži** ceo broj rounds a number to the nearest integer:
 - **Math.round(4.7);** // returns 5
 - **Math.round(4.4);** // returns 4
- **Math.ceil()** zaokružuje broj na prvi **viši** ceo broj
 - **Math.ceil(4.4);** // returns 5
- **Math.floor()** zaokružuje broj na prvi **niži** ceo broj
 - **Math.floor(4.7);** // returns 4
- **Math.floor(Math.random() * 11);** // vraća slučajan broj u intervalu 0-10.

Funkcije za rad sa vremenom

- Metodi objekta window:
- setTimeout() / clearTimeout()
- setInterval() / clearInterval()
- Sa setTimeout se neka akcija izvršava samo jednom i to nakon nekog zadatog vremena u **milisekundama**.
setInterval() se izvršava dok se ne zaustavi kodom !!!
- ```
var ime= setTimeout (expression, timeout);
```
- Sa clearTimeout() se prekida metod setTimeout() pre njegovog izvršenja
- ```
clearTimeout(ime)
```

Klik na taster prikazuje prozor nakon 5 sekundi

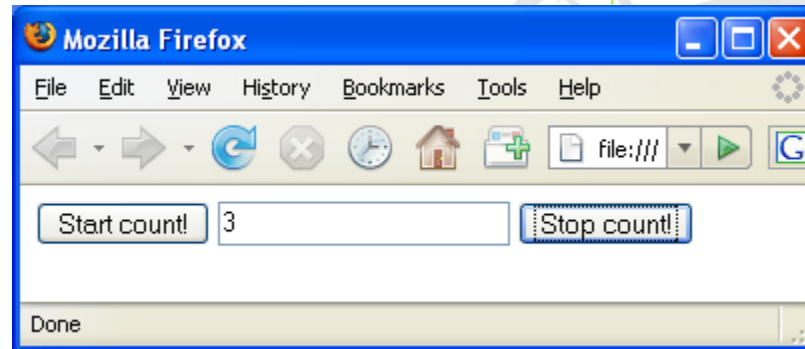
```
<input type="button" name="clickMe" value="Click me and wait!"  
onclick="setTimeout('alert('\Surprise!')', 5000)"/>
```

```
<html>  
<head><script type="text/javascript">  
var c=0  
var t  
  
function timedCount()  
{  
document.getElementById('txt').value=c;  
c=c+1;  
t=setTimeout("timedCount()",1000);  
}  
  
function stopCount()  
{clearTimeout(t);}</script></head>
```

```
</script></head>
```

```
<body><form>  
<input type="button" value="Start count!"onClick="timedCount()">  
<input type="text" id="txt">  
<input type="button" value="Stop count!"onClick="stopCount()">  
</form></body></html>
```

Brojač



Svojstvo innerHTML

- Ovim svojstvom se naknadno može postaviti (definirati) neki novi sadržaj određenog HTML taga (najčešće div ili span)
- Na ovaj način u mnogome se može povećati interaktivnost web strane
- Dinamika se može postići korišćenjem Java Script-a

innerHTML – zamena stringa

```
<script type="text/javascript">  
function promena(){  
    document.getElementById('primer').innerHTML = 'Mika';  
}
```

```
</script>
```

```
<body>
```

```
<p>Dobrodošli korisniče <b id='primer'>Pera</b> </p>
```

```
<input type='button' onclick=promena()' value='Promena teksta'/>
```

```
</body>
```


innerHTML – zamena stila taga

```
<script type="text/javascript">
```

```
function promena(){  
var oldHTML = document.getElementById('paragraf').innerHTML;  
var newHTML = "<span style='color:#ffffff'>" + oldHTML + "</span>";
```

```
document.getElementById('paragraf').innerHTML = newHTML;  
}  
</script>
```

```
<body>  
<p id='paragraf'>Dobrodošao korisniče <b id='korisnik'>Pera</b> </p>  
  
<input type='button' onclick=promena()' value='Promeni'/>  
</body>
```

innerHTML – Primer manipulacije sa linkovima

- Svojstvo innerHTML postavlja ili vraća tekst linka

```
<html>  
<head>  
<script type="text/javascript">
```

```
function PromeniLink() {  
  document.getElementById('proba').innerHTML="Novi Link";  
  document.getElementById('proba').href="http://www.google.com";  
  document.getElementById('proba').target="_blank"; }  
</script>
```

```
</head>
```

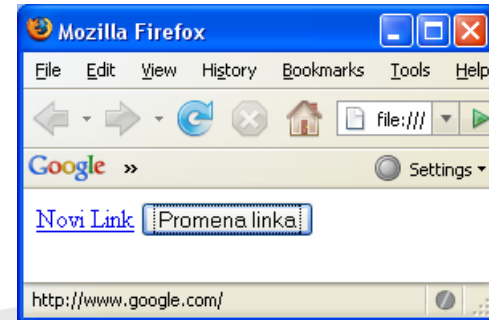
```
<body>
```

```
<a id="proba" href="www.proba.com">Ime</a>
```

```
<input type="button" onclick="PromeniLink()" value="Promena linka">
```

```
</body>
```

```
</html>
```



Style

- Objektom document može se pristupiti evim elementima DOM-a, pa samim tim i atributu style
- Na ovaj način indirektno se pristupa inline CSS-u
- `document.getElementById(id).style.property=new style`
- ```
<body>
<h1 id="id1">My Heading 1</h1>
<button type="button"
onclick="document.getElementById('id1').style.color = 'red'">
Click Me!</button>
</body>
```

## Objedinjen primer a)

```
<html>
<head>
<script language="JavaScript" >
function skrivanje(){
 document.getElementById('user').style.visibility = "hidden";
 document.getElementById('pass').style.visibility = "hidden";
 document.formular.taster.disabled= true ;}
function aktivacija_user(){
 document.getElementById('user').style.visibility = "visible";}
function provera_user(){
if (document.formular.username.value.length < 5)
{
 document.getElementById('user').innerHTML = "Polje mora da bude duze od 5
karaktera";
 document.getElementById('username').focus();
 document.getElementById('username').select();}
```

## Objedinjen primer b)

```
else{
 document.getElementById('user').innerHTML = "OK";
 if ((document.getElementById('user').innerHTML == "OK") &&
(document.getElementById('pass').innerHTML == "OK"))
 {document.formular.taster.disabled = false ;}
 } }

function aktivacija_pass(){
 document.getElementById('pass').style.visibility = "visible";}

function provera_pass(){
 if (document.formular.password.value.length < 5) {
 document.getElementById('pass').innerHTML = "Polje mora da bude
duze od 5 karaktera";
 document.getElementById('password').focus();
 document.getElementById('password').select();
 }
```

## Objedinjen primer c)

```
else{
 document.getElementById('pass').innerHTML = "OK";
 if ((document.getElementById('user').innerHTML == "OK") &&
(document.getElementById('pass').innerHTML == "OK"))
 {document.formular.taster.disabled = false ;}
 } }
```

```
</script>
```

```
</head>
```

```
<body onLoad="skrivanje()">
```

```
<form name="formular" >
```

```
<input type="text" name="username" id="username" onFocus="aktivacija_user()"
onBlur="provera_user()"> Obavezno polje

```

```
<input type="text" name="password" onFocus="aktivacija_pass()"
onBlur="provera_pass()"> Obavezno polje

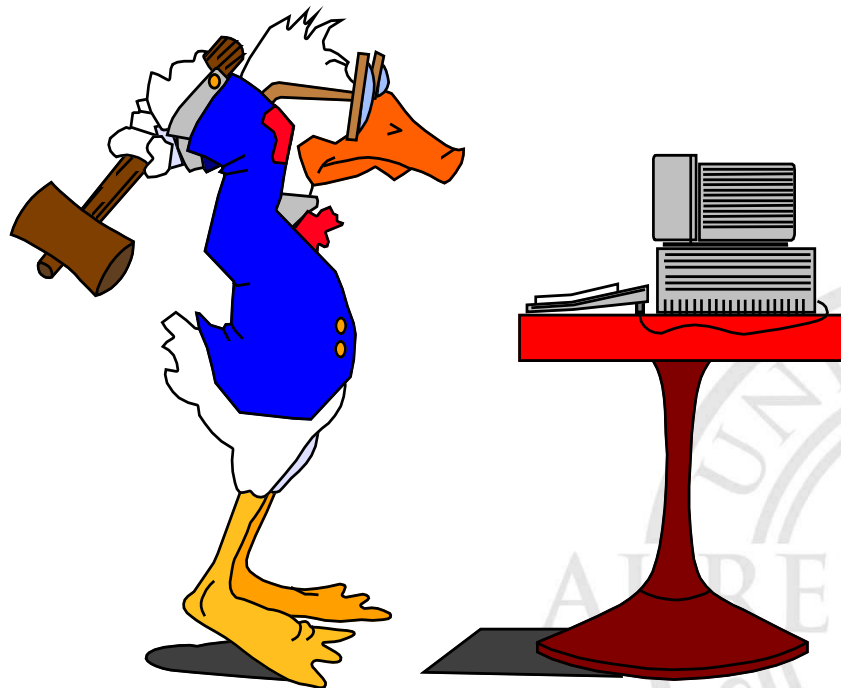
```

```
<input type="submit" value=" OK " name="taster">
```

```
</form> </body> </html>
```



# Toliko za sada !!!





# Internet i veb tehnologije

## Java script – Rad sa događajima



Dr Nenad Kojić  
Dr Dragoslav Danilović