**Events** 

**POWERED BY:** 





# Sadržaj

- → HTML and CSS
- → JavaScript



#### HTML & CSS

- <u>HyperText Markup Language</u>
  - tells web browser how to display web page
  - browser program which interprets tags and displays contents
  - elements block, inline
  - websites static, dynamic
- <u>Cascading Style Sheets</u>



- programming language (we are focusing on client-side only)
- allows you to implement complex things on web pages (dynamically updating content, animate images, ...)
- creates interactivity
  - static to dynamic web pages
- used on most web sites/applications
  - twitter, facebook, ...



- Data types
  - number, string, boolean, undefined
- → Variables
  - scope, reserved words, naming, data type conversion
- Operators
  - arithmetic, comparison, logical, bitwise, assignment, special operators (typeof, conditional)



- → Control flow
  - if-else, switch-case
- → Loops
  - while, do-while, for, foreach
- → Functions
  - parameters, scope, recursive, callback, timers
- Arrays
- → Objects
  - property, methods, iteration, <u>constructor</u>, copy by ref.



- AJAX Asynchronous JavaScript And XML?
  - update a web page without reloading the page
  - request data from server (after the page has loaded)
  - receive data from server (after the page has loaded)
  - send data to server (in the background)
- → XML, JSON
  - designed to store and transport (exchange) data



- How a web browser displays a web page?
- → URL
  - scheme://domain:port/path?query\_str#fragment\_id
  - •(https://www.youtube.com/watch?v=2ww8vNnCXys)





- 1. Make a button. When user clicks on it, ask for a string. When we give it a string, we want every word in string to be capitalized and shown in an alert.
  - imperative <a href="https://jsfiddle.net/g7w8pseg/">https://jsfiddle.net/g7w8pseg/</a>
  - object oriented <a href="https://jsfiddle.net/k0u6v0u6/">https://jsfiddle.net/k0u6v0u6/</a>
  - functional <a href="https://jsfiddle.net/119m7erx/">https://jsfiddle.net/119m7erx/</a>
  - ES6 <a href="https://jsfiddle.net/cgr868do/">https://jsfiddle.net/cgr868do/</a>



Some programs work with direct user input, such as mouse and keyboard interaction. The timing and order of such input can't be predicted in advance. This requires a different approach to control flow than the one we have used so far.

```
<script>
 var par = document.guerySelector('button');
 par.onclick = function () {
  console.log('Clicked);
 par.addEventListener("click", function() {
  console.log("You clicked!");
</script>
```



- → click, dblclick, contextmenu
- → mouseup, mousedown, mouseover
- → load, unload, beforeunload, scroll
- keyup, keydown, keypress
- → blur, focus, change, submit, reset
- drop, drag, dragstart, dragend
- copy, cut, paste
- → online, offline

```
var el = document.getElementById(
"elem" );
el.onclick = function( event ) {
event.preventDefault();
event.stopPropagation();
el.addEventListener("click", myFunction,
false);
el.removeEventListener( "click",
myFunction, false);
```



- event object <a href="https://jsfiddle.net/w5wkaw77/">https://jsfiddle.net/w5wkaw77/</a>
- propagation <a href="https://jsfiddle.net/01e8rxg5/">https://jsfiddle.net/01e8rxg5/</a>
- capturing <a href="https://jsfiddle.net/1q5d680s/">https://jsfiddle.net/1q5d680s/</a>
- prevent default actions <a href="https://jsfiddle.net/zxzs0070/">https://jsfiddle.net/zxzs0070/</a>
- → key events <a href="https://jsfiddle.net/20ee4qz2/">https://jsfiddle.net/20ee4qz2/</a>
- mouse events <a href="https://jsfiddle.net/xk598wtb/">https://jsfiddle.net/xk598wtb/</a>



2. Make 2 squares, one bigger than other. Smaller square should be centered vertically and horizontally inside bigger square. Click on either square should randomly change color for only that (clicked) square.

Rješenje: <a href="https://jsfiddle.net/44ya9uea/">https://jsfiddle.net/44ya9uea/</a>



#### **BlaBlaDev**

- Calculator project: 10% additional points on final test
- https://blabladev.com/



# THANK YOU for attention