

# Lesson13

## Javascript Basics

# Functions

## Fundamental building blocks in JavaScript

- A **function definition** (also called a **function declaration**, or **function statement**) consists of the **function** keyword, followed by **name** of the function, a list of parameters to the function, enclosed in parentheses and separated by commas, The JavaScript statements that define the function, enclosed in curly brackets, **{...}**
- For example, the following code defines a simple function named **square**:

```
1 | function square(number) {  
2 |     return number * number;  
3 | }
```

- See on lesson materials for further examples and informations

# Arrays

## “Lists”

- Arrays are generally described as "list-like objects"; they are basically single objects that contain multiple values stored in a list. Array objects can be stored in variables.
- `['bread', 'milk', 'cheese']` - arrays consist of square brackets and elements that are separated by commas.

# Arrays functions

Javascript creates helper functions for each array behind the scene

- `var myArray = [ "one", "two", "three"];`
- `myArray.length` - counts items in array and return number of items (3)
- `myArray.push("four")` - put item at the end of the array
- `myArray.unshift("zero")` - put item at the beginning of the array
- `myArray.pop()` - remove last item from array
- `myArray.shift()` - remove first (index [0]) element from array
- `myArray.indexOf("two")` - search array for value and return index number of this value, if there is no such value it returns -1

# Events

## “click” event

- Events are actions or occurrences that happen in the system you are programming, which the system tells you about so you can respond to them in some way if desired.
- To create function that will “listen” your HTML Dom element you need to attach it with special javascript - `htmlElement.addEventListener("click", functionToProcessEvent)`
- See on lesson materials for examples