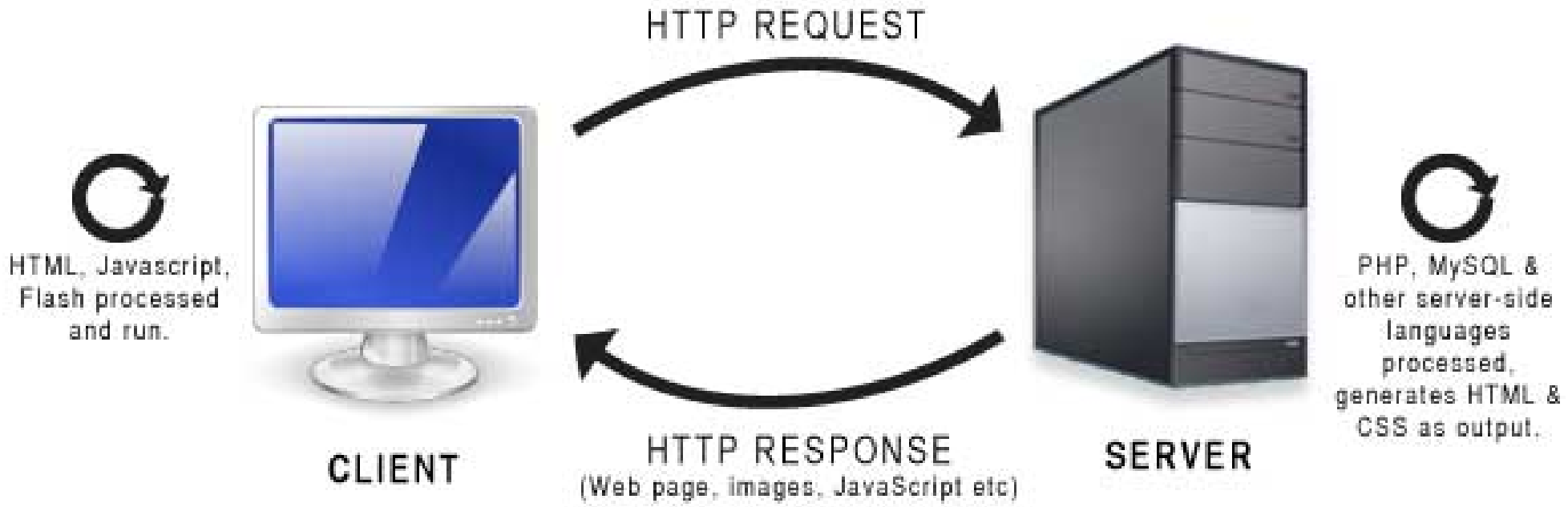
JavaScript (JS)

HTML
JS
CSS

What is JavaScript?

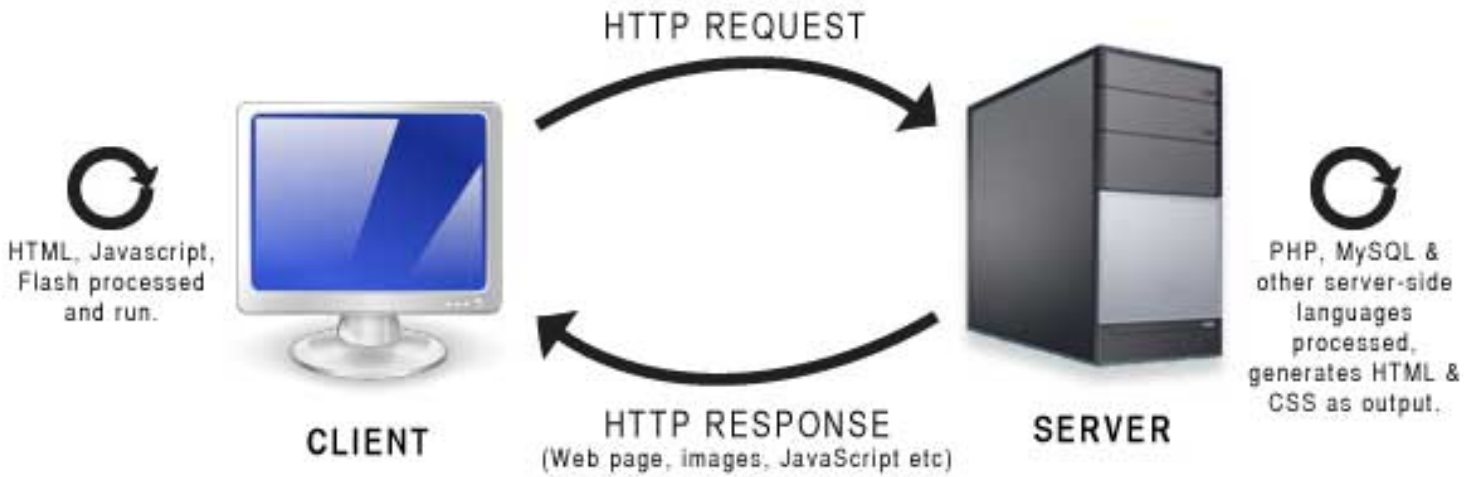
- AJAX
  - Twitter
  - Google
- UI
  - WOW.js
- Games/Art/Experiments
  - Alexei Shulgin's Form Art
  - Form Renderer
  - Google Gravity
  - Emoji Booth
  - GoreScript
- Data Visualization
  - Urban Jungle
  - Pacman Maps
  - Distance to Mars

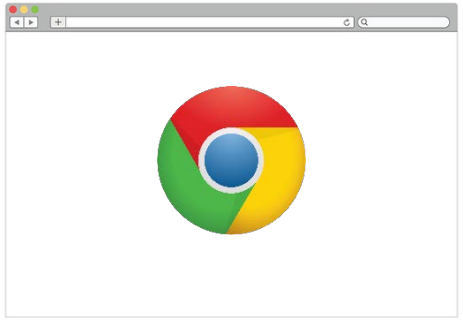
Client vs Server

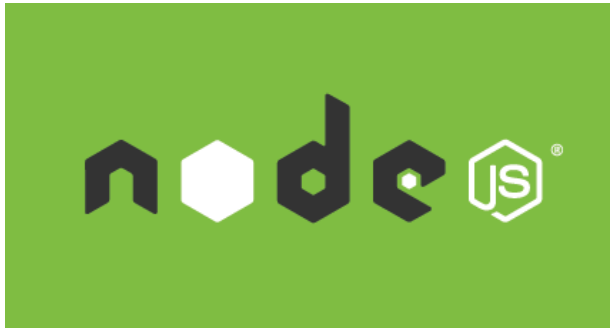


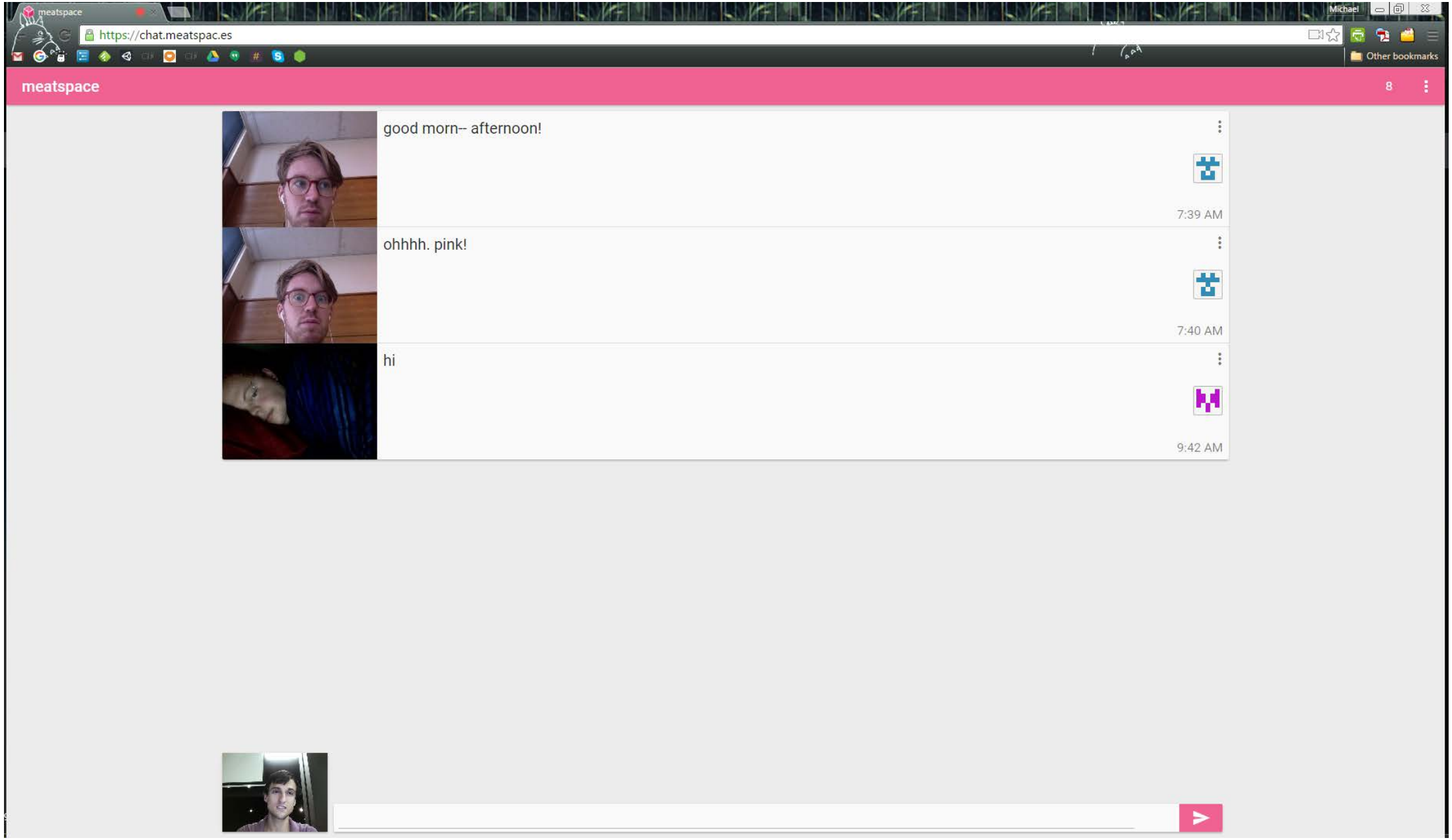
http://techidiocy.com/wp-content/uploads/2013/07/Server-Vs-Client-Time-Zone-Difference-Problem.jpg

Client vs Server

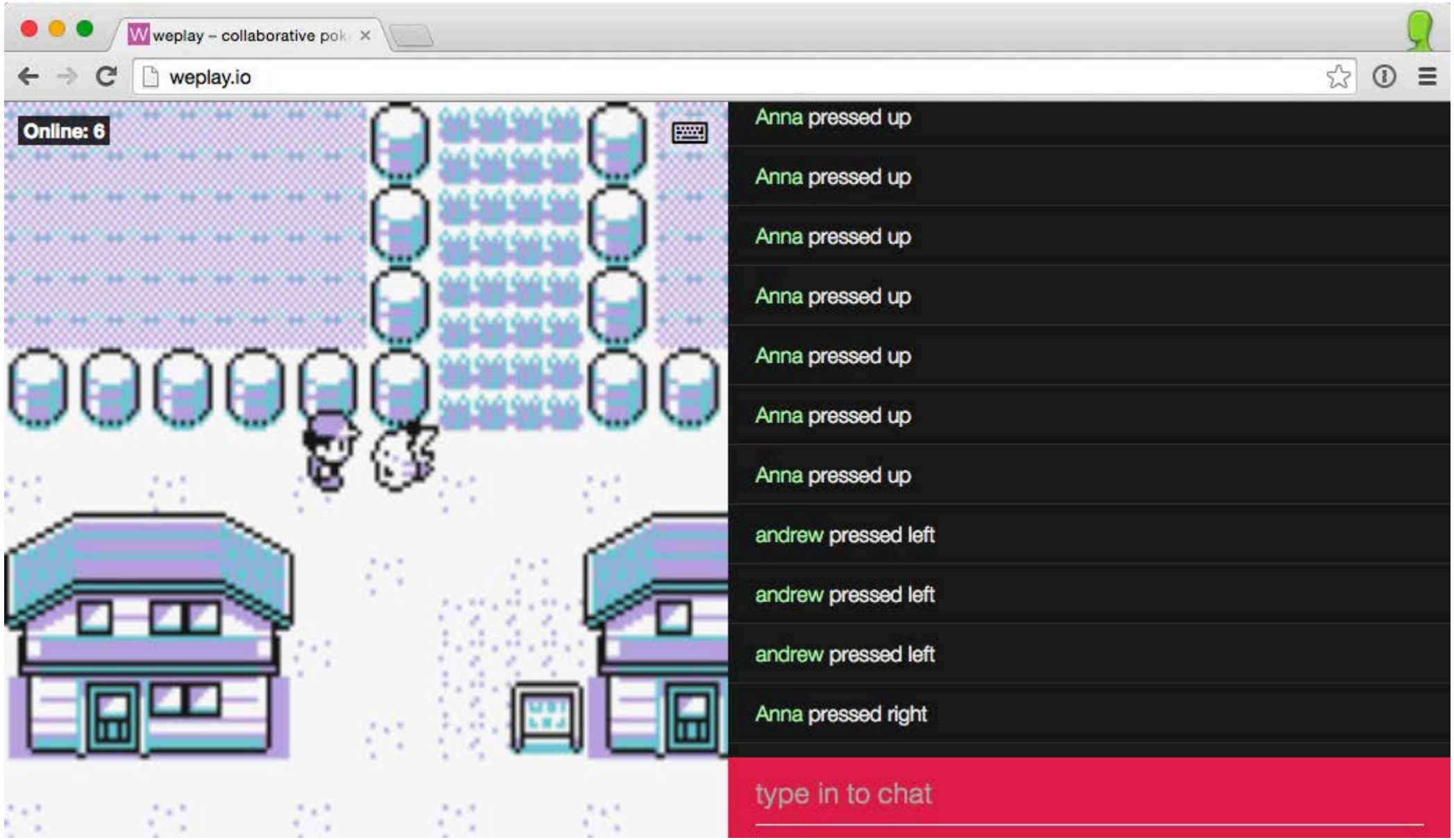








https://chat.meatspac.es/



http://weplay.io/

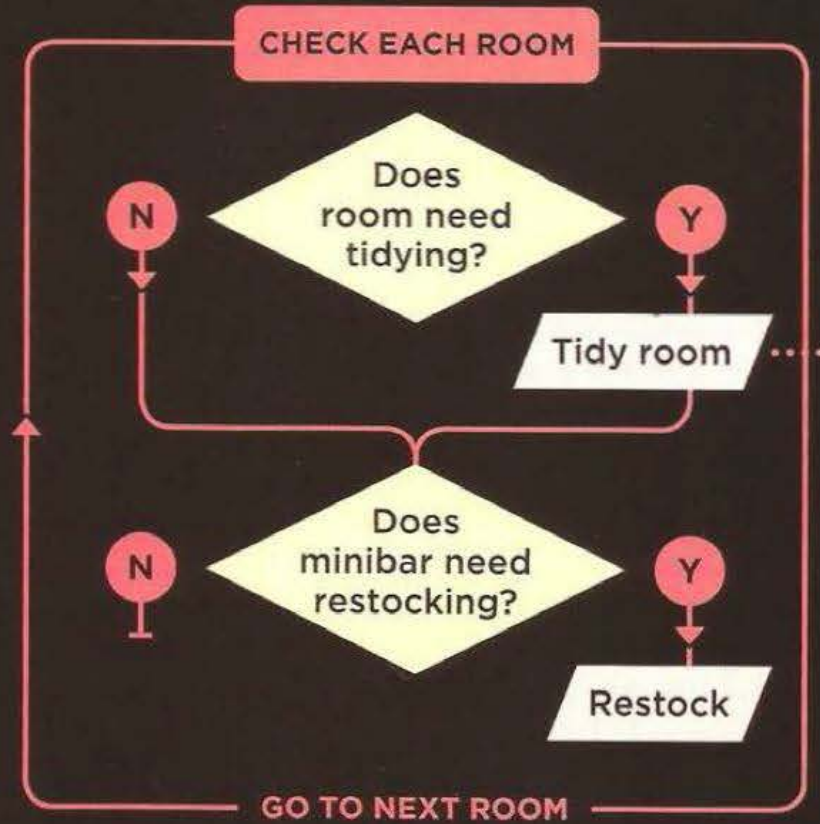
Programming?

```
00110001 00000000 00000000
00110001 00000001 00000001
00110011 00000001 00000010
01010001 00001011 00000010
00100010 00000010 00001000
01000011 00000001 00000000
01000001 00000001 00000001
00010000 00000010 00000000
01100010 00000000 00000000
```

```
var sum = 0;
var count = 0;
while (count <= 10) {
    sum += count;
    count += 1;
}
alert(count);
```

Modified from: http://eloquentjavascript.net/

FLOWCHART: TASKS OF A HOTEL CLEANER



LIST: STEPS REQUIRED TO TIDY A ROOM

STEP 1	Remove used bedding
STEP 2	Wipe all surfaces
STEP 3	Vacuum floors
STEP 4	Fit new bedding
STEP 5	Remove used towels and soaps
STEP 6	Clean toilet, bath, sink, surfaces
STEP 7	Place new towels and soaps
STEP 8	Wipe bathroom floor

From: JavaScript & jQuery by Jon Duckett

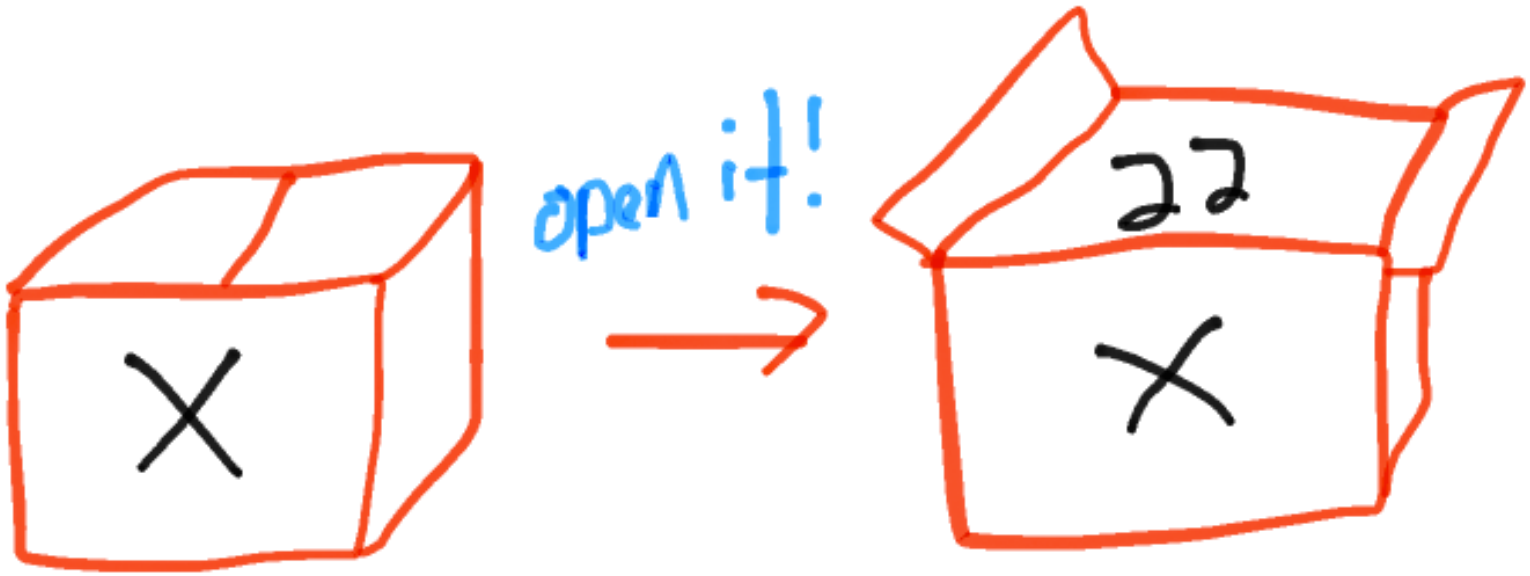
Variables

Numbers & Strings

```
console.log("Hi :)");
```

FUNCTION ARGUMENT END

Named Boxes



http://cs-blog.khanacademy.org/2013/09/teaching-variables-analogies-and.html

VARIABLE NAME

END

```
var message = "Hello sir or madam.";
```

CREATE

VALUE

Variable Naming

Here are six rules you must always follow when giving a variable a name:

1

The name must begin with a letter, dollar sign ($), or an underscore (_). It must **not** start with a number.

2

The name can contain letters, numbers, dollar sign ($), or an underscore (_). Note that you must not use a dash (-) or a period (.) in a variable name.

3

You cannot use **keywords** or **reserved** words. Keywords are special words that tell the interpreter to do something. For example, `var` is a keyword used to declare a variable. Reserved words are ones that may be used in a *future* version of JavaScript.

ONLINE EXTRA

View a full list of keywords and reserved words in JavaScript.

4

All variables are case sensitive, so `score` and `Score` would be different variable names, but it is bad practice to create two variables that have the same name using different cases.

5

Use a name that describes the kind of information that the variable stores. For example, `firstName` might be used to store a person's first name, `lastName` for their last name, and `age` for their age.

6

If your variable name is made up of more than one word, use a capital letter for the first letter of every word *after* the first word. For example, `firstName` rather than `firstname` (this is referred to as camel case). You can also use an underscore between each word (you cannot use a dash).

JavaScript Reserved Keywords

do	true	export
if	void	import
in	with	public
for	await	return
let	break	static
new	catch	switch
try	class	typeof
var	const	default
case	false	extends
else	super	finally
enum	throw	package
eval	while	private
null	yield	continue
this	delete	debugger

Built-in Variables

undefined
external
parseInt
location
sessionStorage
screenLeft
outerHeight
pageYOffset
innerHeight
frameElement
closed
scrollbars
history

unescape
isFinite
escape
window
URL
clientInformation
outerWidth
scrollY
innerWidth
parent
status
personalbar
name

document
isNaN
NaN
caches
defaultStatus
console
screenY
pageXOffset
screen
opener
toolbar
menubar
self

eval
parseFloat
top
localStorage
screenTop
devicePixelRatio
screenX
scrollX
navigator
frames
statusbar
locationbar

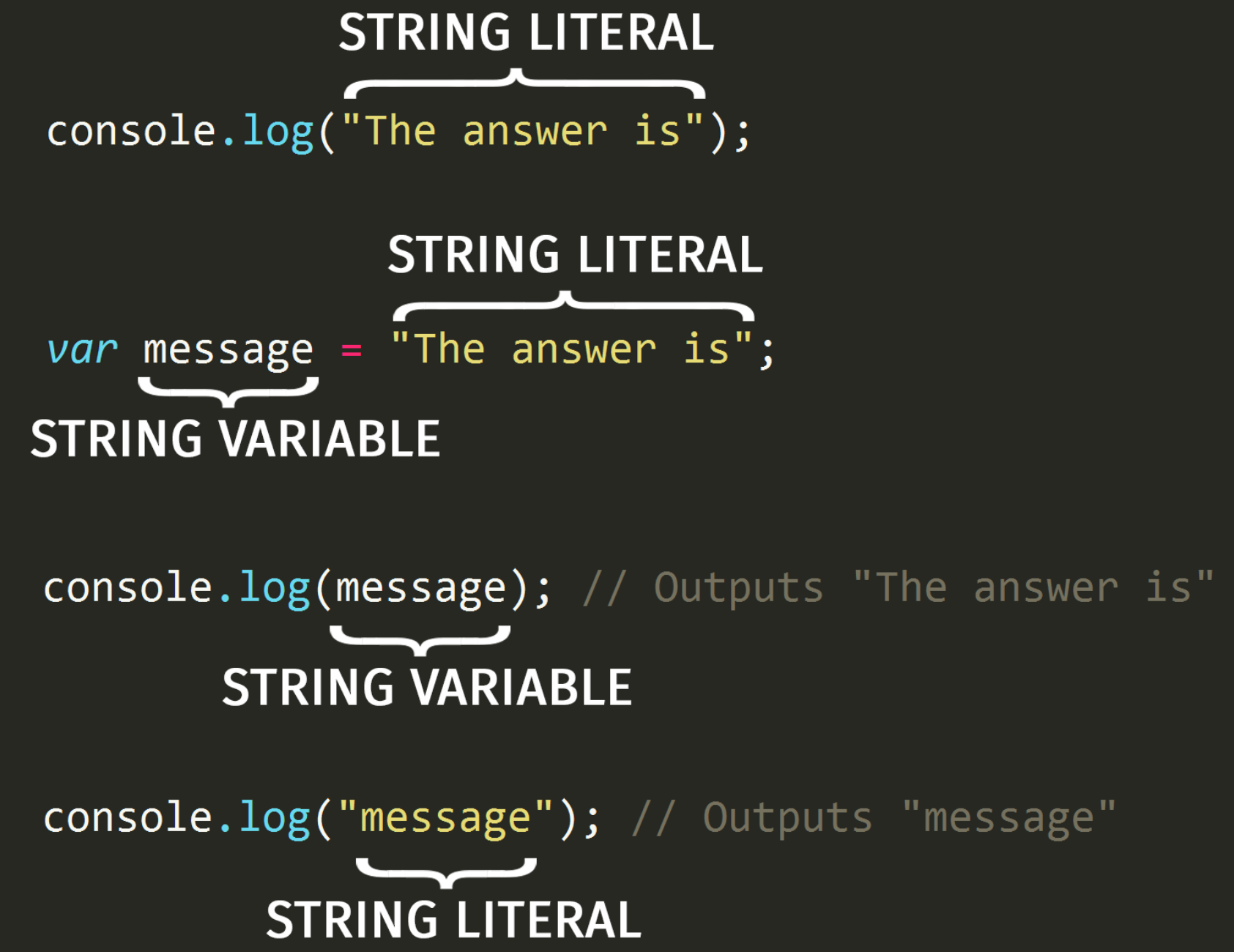
Literals vs Variables

```
console.log("The answer is");

var message = "The answer is";

console.log(message); // Outputs "The answer is"

console.log("message"); // Outputs "message"
```


STRING LITERAL
console.log("The answer is");
STRING LITERAL
var message = "The answer is";
STRING VARIABLE
console.log(message); // Outputs "The answer is"
STRING VARIABLE
console.log("message"); // Outputs "message"
STRING LITERAL

NUMBER LITERAL

```
console.log(42);
```

NUMBER LITERAL

```
var num = 42;
```

NUMBER VARIABLE

```
console.log(num); // Outputs "42"
```

NUMBER VARIABLE

```
console.log("num"); // Outputs "num"
```

STRING LITERAL