

JAVASCRIPT

JAVASCRIPT?

JAVASCRIPT

A browser-based programming language that adds interactivity to your website.

JAVASCRIPT

an object-oriented computer programming language
commonly used to create interactive effects within
web browsers.

JAVASCRIPT

a scripting languages, primarily used on the Web. It is used to enhance HTML pages and is commonly found embedded in HTML code. JavaScript is an dynamic language and renders web pages in an interactive and dynamic fashion. This allowing the pages to react to events, exhibit special effects, accept variable text, validate data, create cookies, detect a user's browser, etc.

JAVASCRIPT?

CSS



html

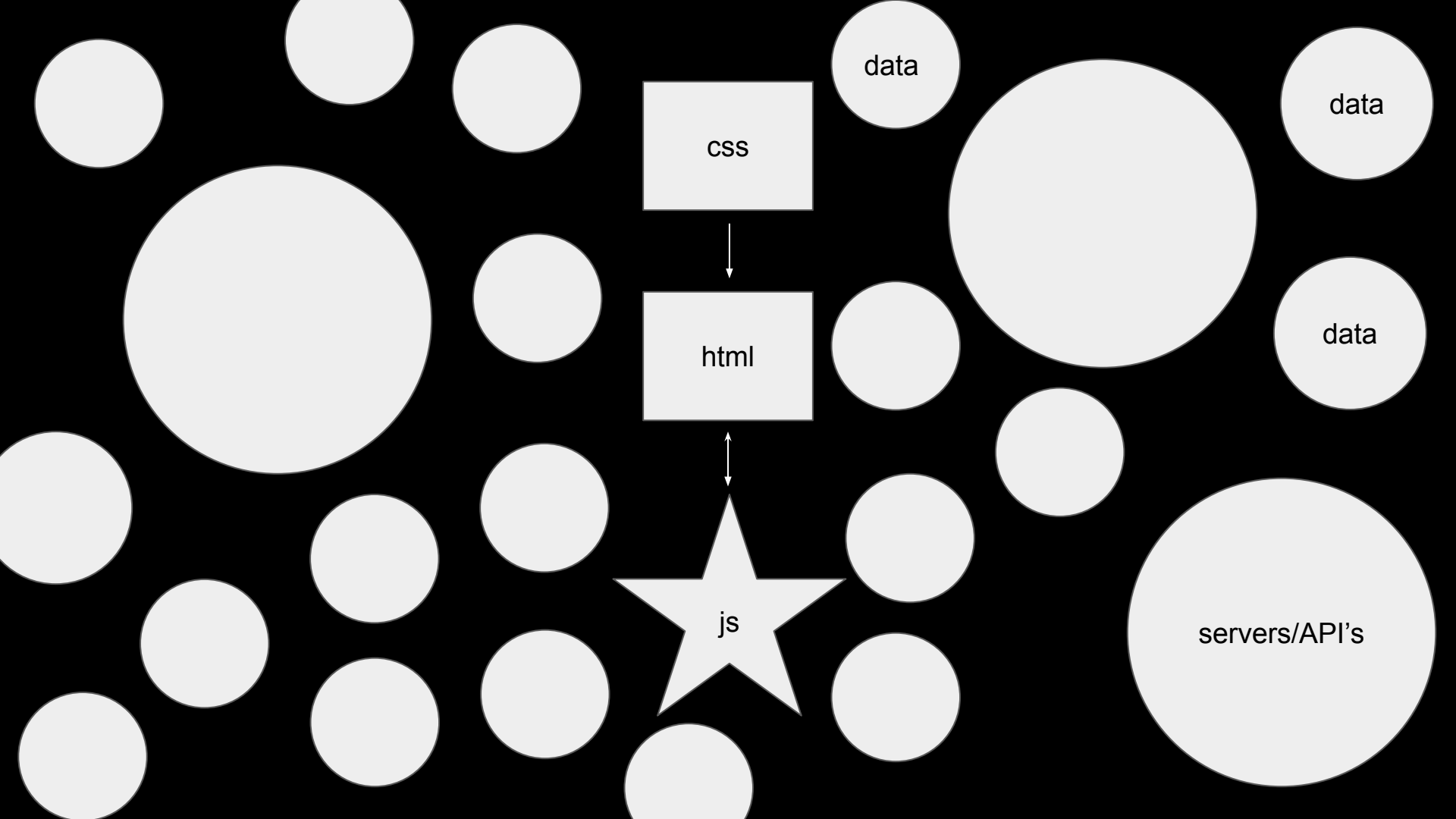
CSS



html



js



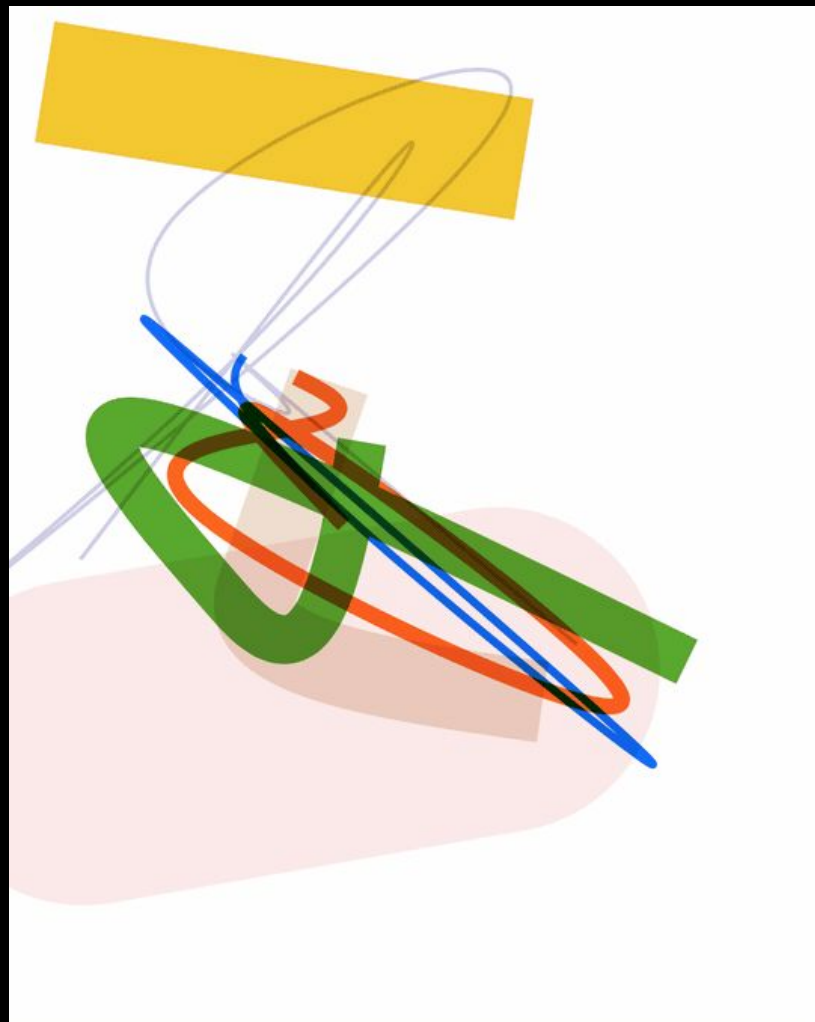
JAVASCRIPT

Gives you control of a website and its relationship with systems that surround it.

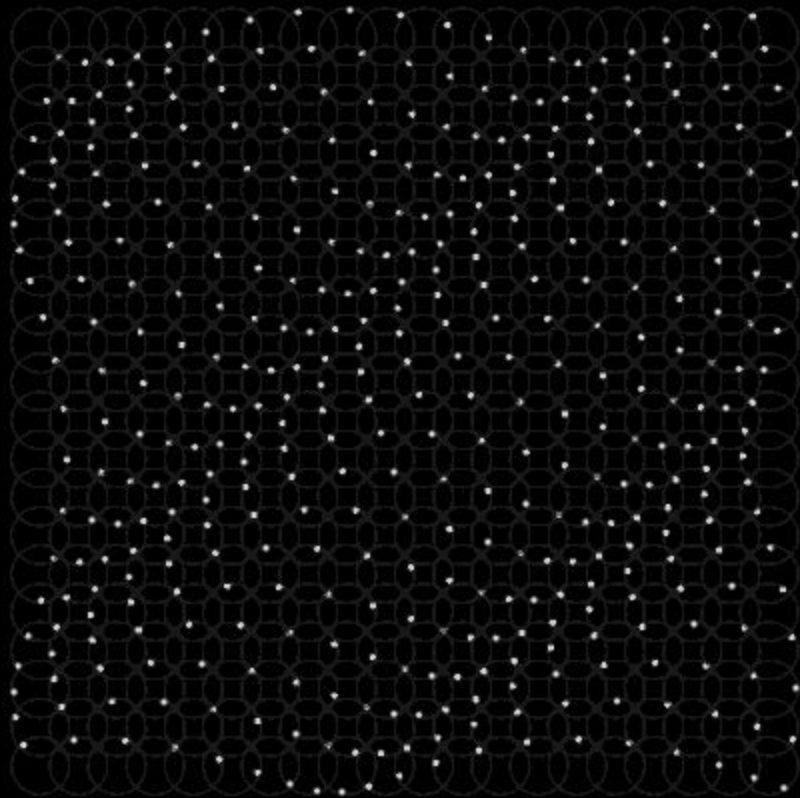
JS MATH TASKS

Method	Description
abs(x)	Returns the absolute value of x
acos(x)	Returns the arccosine of x, in radians
asin(x)	Returns the arcsine of x, in radians
atan(x)	Returns the arctangent of x as a numeric value between $-\pi/2$ and $\pi/2$ radians
atan2(y, x)	Returns the arctangent of the quotient of its arguments
ceil(x)	Returns the value of x rounded up to its nearest integer
cos(x)	Returns the cosine of x (x is in radians)
exp(x)	Returns the value of E^x
floor(x)	Returns the value of x rounded down to its nearest integer
log(x)	Returns the natural logarithm (base E) of x
max(x, y, z, ..., n)	Returns the number with the highest value
min(x, y, z, ..., n)	Returns the number with the lowest value
pow(x, y)	Returns the value of x to the power of y
random()	Returns a random number between 0 and 1
round(x)	Returns the value of x rounded to its nearest integer
sin(x)	Returns the sine of x (x is in radians)
sqrt(x)	Returns the square root of x
tan(x)	Returns the tangent of an angle

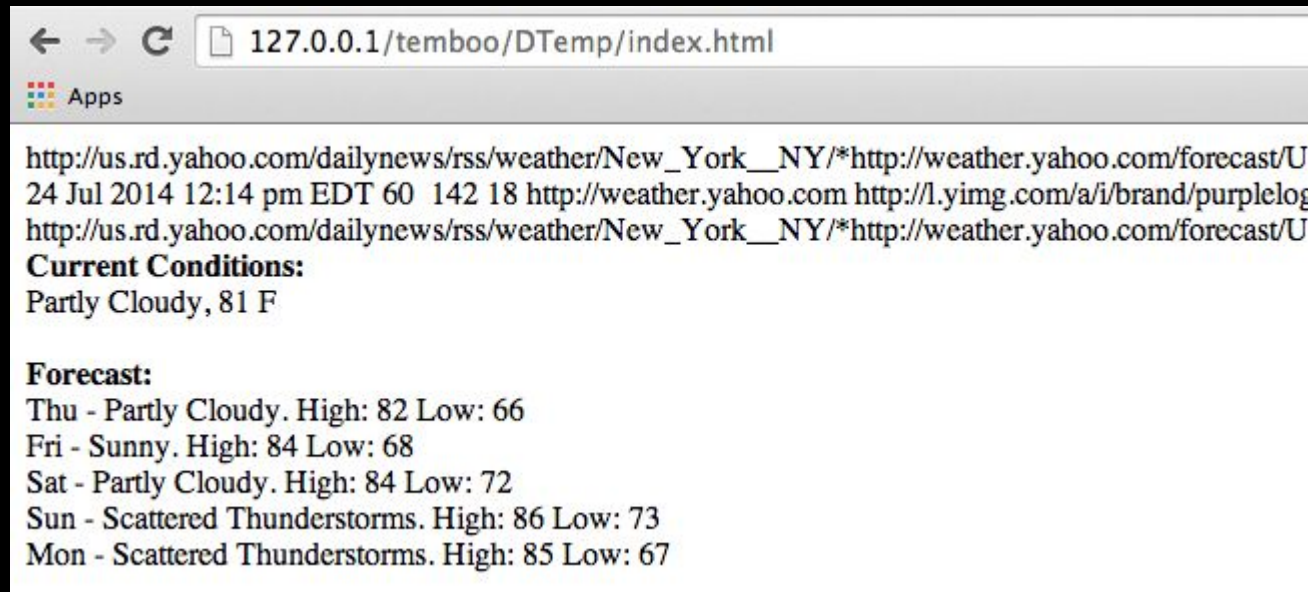
PAPER JS



P5 JS



YAHOO WEATHER API



A screenshot of a web browser window. The address bar shows the URL `127.0.0.1/temboo/DTemp/index.html`. Below the address bar, there are several lines of text, including a timestamp `24 Jul 2014 12:14 pm EDT` and a temperature `60`. The text is partially obscured by a large, semi-transparent watermark that reads `http://us.rd.yahoo.com/dailynews/rss/weather/New_York__NY/*http://weather.yahoo.com/forecast/U`. Below the watermark, the text `Current Conditions:` is followed by `Partly Cloudy, 81 F`. Further down, the text `Forecast:` is followed by a list of weather conditions for the days of the week: `Thu - Partly Cloudy. High: 82 Low: 66`, `Fri - Sunny. High: 84 Low: 68`, `Sat - Partly Cloudy. High: 84 Low: 72`, `Sun - Scattered Thunderstorms. High: 86 Low: 73`, and `Mon - Scattered Thunderstorms. High: 85 Low: 67`.

← → ↻ 127.0.0.1/temboo/DTemp/index.html

Apps

http://us.rd.yahoo.com/dailynews/rss/weather/New_York__NY/*http://weather.yahoo.com/forecast/U
24 Jul 2014 12:14 pm EDT 60 142 18 http://weather.yahoo.com http://l.yimg.com/a/i/brand/purplelog
http://us.rd.yahoo.com/dailynews/rss/weather/New_York__NY/*http://weather.yahoo.com/forecast/U

Current Conditions:
Partly Cloudy, 81 F

Forecast:
Thu - Partly Cloudy. High: 82 Low: 66
Fri - Sunny. High: 84 Low: 68
Sat - Partly Cloudy. High: 84 Low: 72
Sun - Scattered Thunderstorms. High: 86 Low: 73
Mon - Scattered Thunderstorms. High: 85 Low: 67

JAVASCRIPT!

VARIABLES STORE DATA

FUNCTIONS EXECUTE TASK(S)

IF STATEMENTS CREATE COMPARISON PARAMETERS

FOR LOOPS DO SOMETHING OVER X

VARIABLES

VARIABLES STORE DATA

`var` `name`

VARIABLES STORE DATA

```
var name = "john"
```

```
var number = 12
```

VARIABLES STORE DATA

```
var name = "john"  
var number = 12  
var approved = true
```

VARIABLES STORE DATA

```
var name = "john"
```

```
var number = 12
```

```
var approved = true
```

```
var colors = ["red", "blue", "green"]
```

VARIABLES STORE DATA

```
var name = "john"
```

```
var number = 12
```

```
var approved = true
```

```
var colors = ["red", "blue", "green"]
```

```
var class = {school: "Parsons",  
             year: "2018",  
             totalClasses: 15};
```

FUNCTIONS

FUNCTIONS EXECUTE A TASK

```
function class() {  
  console.log(name)  
}
```


FUNCTIONS EXECUTE A TASK

```
function class(e) {  
  console.log(e)  
}
```

```
class(thing1)  
class(thing2)
```

IF STATEMENTS

IF STATEMENTS CREATE COMPARISON PARAMETERS

```
if (temperature > 80) {  
  console.log("hot!");  
}
```

IF STATEMENTS CREATE COMPARISON PARAMETERS

```
if (temperature > 80) {  
  console.log("hot!");  
}
```

```
else {  
  console.log("not hot!");  
}
```

IF STATEMENTS CREATE COMPARISON PARAMETERS

```
if (temperature == 80) {  
  console.log("80 Degrees!");  
}
```

IF STATEMENTS CREATE COMPARISON PARAMETERS

```
if (temperature == 80) {  
  console.log("80 Degrees!");  
}
```

```
else {  
  console.log("not 80 Degrees!");  
}
```

IF STATEMENTS CREATE COMPARISON PARAMETERS

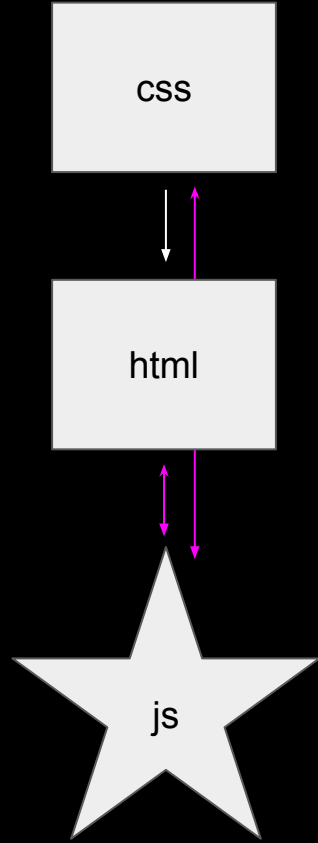
```
if (temperature <= 80) {  
  console.log("Less Than OR Equal to 80  
Degrees!");  
}  
  
else {  
  console.log("Over 79 Degrees!");  
}
```

FOR LOOPS

FOR LOOPS DO SOMETHING OVER X

```
//Log 0 1 2 3 4 5 6 7 8 9 10
```

```
for( i=0; i<=10; i++){  
    console.log(i)  
}
```



JQUERY

JQUERY

jQuery is a concise and fast JavaScript library that can be used to simplify event handling, HTML document traversing, Ajax interactions and animation for speedy website development. jQuery simplifies the HTML's client-side scripting, thus simplifying Web 2.0 applications development.

JQUERY

Target my HTML tags and use JS on them...

BASIC SYNTAX

```
$(selector).action()
```

`$` to define/access jQuery

`(selector)` to "query (or find)" HTML elements.

`action()` to be performed on the element(s)

SELECTORS

`$(document)`

`$(window)`

`$("body")`

`$("p")`

`$(".class")`

`$("#div")`

EVENTS

```
$( "#div" ).load( do something )  
$( "#div" ).mousedown( do something )  
$( "#div" ).mouseenter( do something )  
$( "#div" ).touchstart( do something )  
$( "#div" ).scroll( do something )  
+ Much more....
```


METHODS

```
$("#div").css( 'background-color,' 'red' )  
$("#div").text( 'new text' )  
$("#div").append( '$("#newDiv")' )  
  
var divWidth = $("#div").width()
```

<https://api.jquery.com/>