



# I Workshop

## Linguagens de Programação



Técnico em Informática para Internet  
Lógica de Programação

NOTURNO 211-INF-1N-1-LÓG120



*Serviço Nacional de Aprendizagem Industrial*

**PELO FUTURO DO TRABALHO**

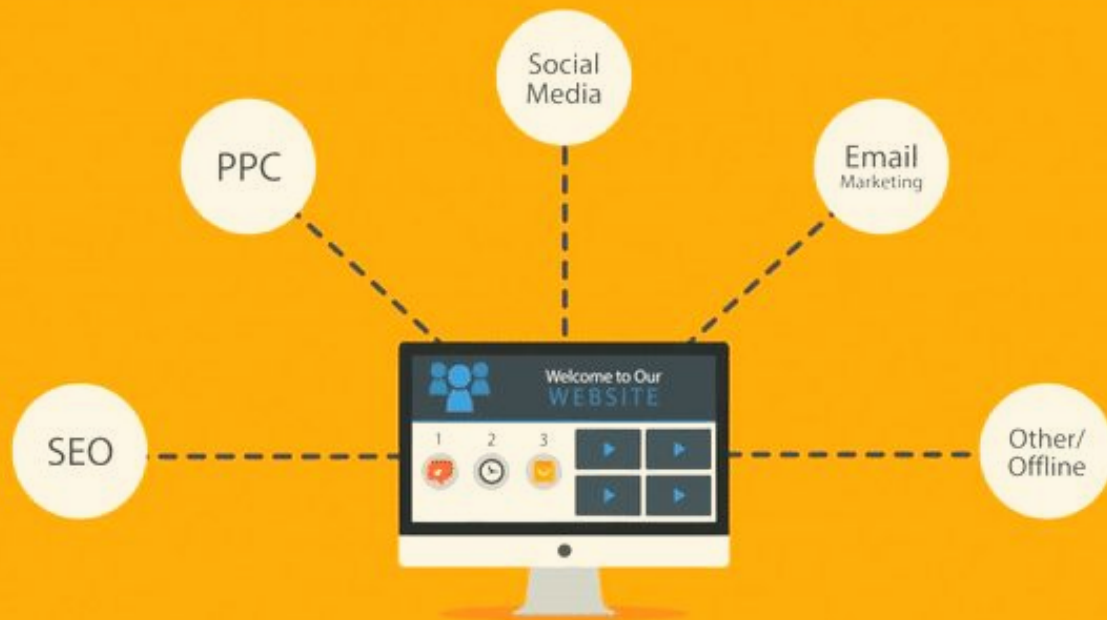
# JS

# Workshop

## JavaScript

Equipe: Leidson Luiz, Silvio Marcio, Felipe Caldas

# O que é uma linguagem de programação?



# Introdução

Assim como em qualquer linguagem humana, temos diversas maneiras de se comunicar e de expor certas informações, e por isso, assim como na nossa comunicação, também temos variadas linguagens de programação para que possamos definir uma especificidade no que queremos falar ou comandar.

- I. Paradigma Procedural ou Imperativo
- II. Paradigma Orientado a Objetos (OOP)
- III. Linguagem de Alto Nível
- IV. Tradutor
- V. Compilador
- VI. Linguagem de Baixo Nível
- VII. Linguagem de Máquina
- VIII. Linguagem Assembly

# Client-side x Server-Side



# Porque devo usar o JavaScript



1. Popularidade
2. Criação de Sites
3. Manipulação com CSS e HTML
4. Frameworks
5. Recursos

# Mercado de trabalho



# Origem do JS



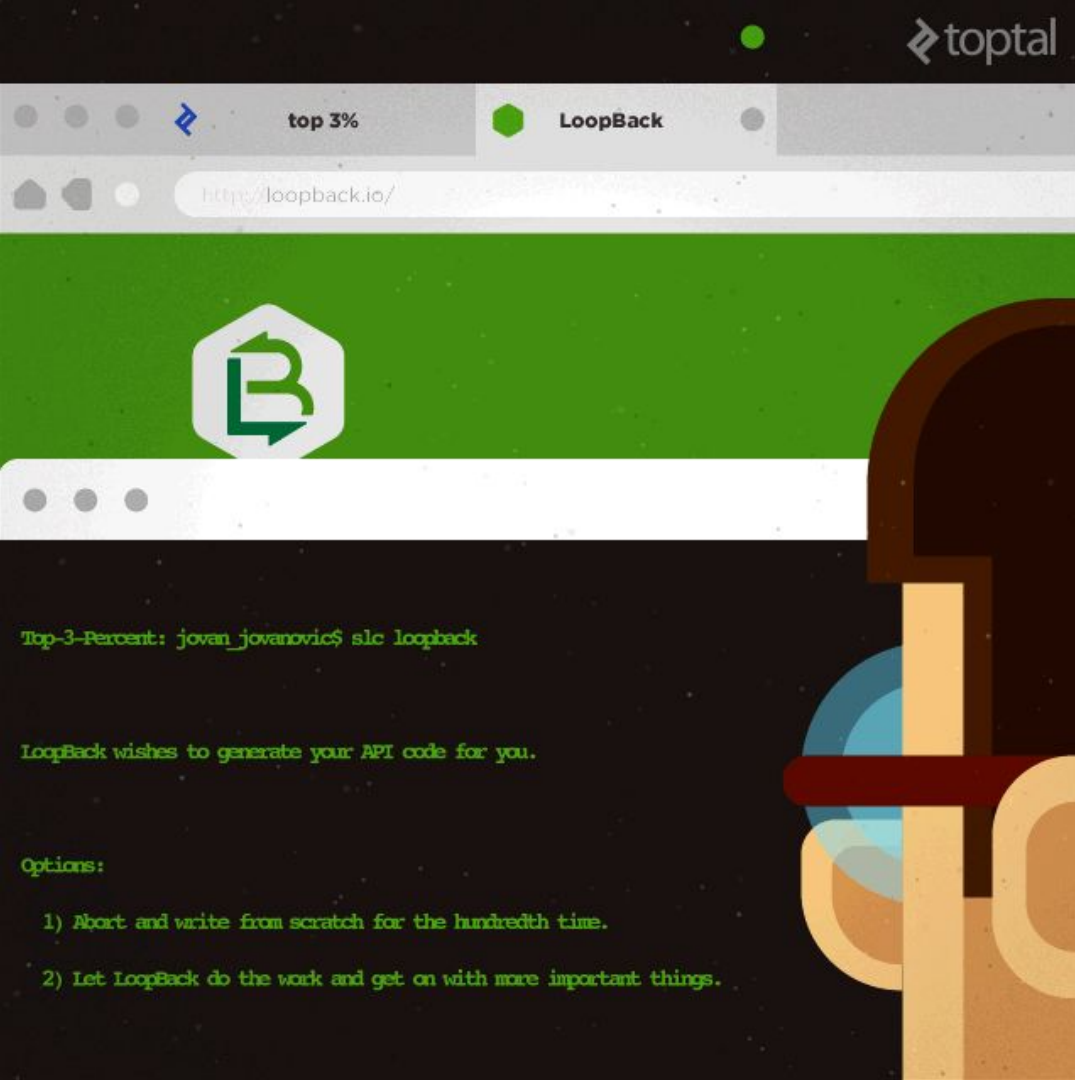
**Brendan Eich**





# Possibilidades





# Node JS



# Qualidade de Código

```
1  function bubbleSort(array, ascending) {  
2    ascending = (typeof ascending === 'undefined') || ascending;  
3    for(var i = 0; i < array.length; i++){  
4      for(var j = array.length - 1; j > i; j--){  
5        if(ascending ? array[j] < array[j - 1] : array[j - 1] < array[j]){  
6          var temp = array[j];  
7          array[j] = array[j - 1];  
8          array[j - 1] = temp;  
9        }  
10     }  
11  }  
12  
13  return array;  
14 }  
15
```

# Banco de Dados

mongoDB Charts

Dashboards

Data Sources

User Management

Tom ▼

## < Super Store Supply Sales

Sales, Customer Analytics and More

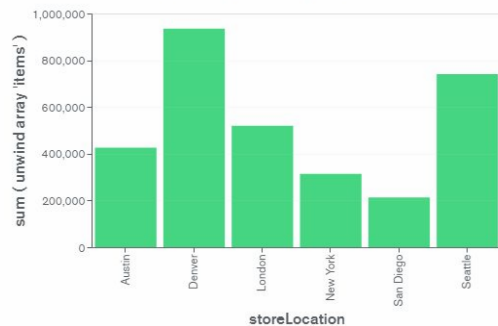
Updated 21 minutes ago



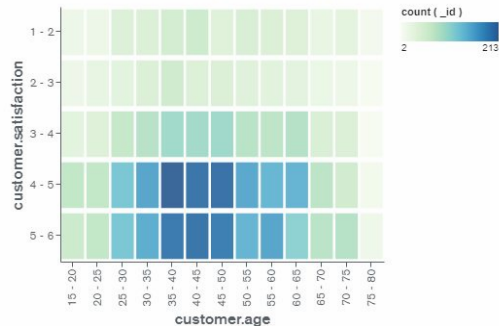
Add Chart

Access

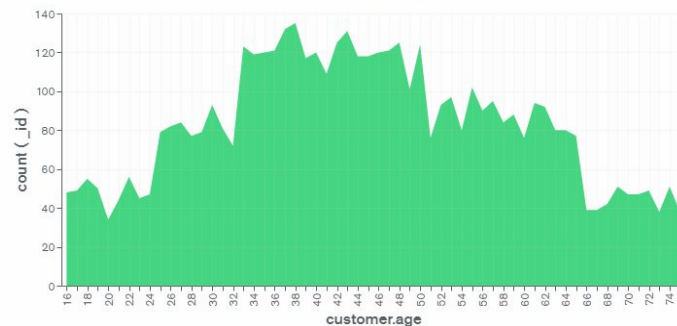
### Total Sales (\$) by Store Location



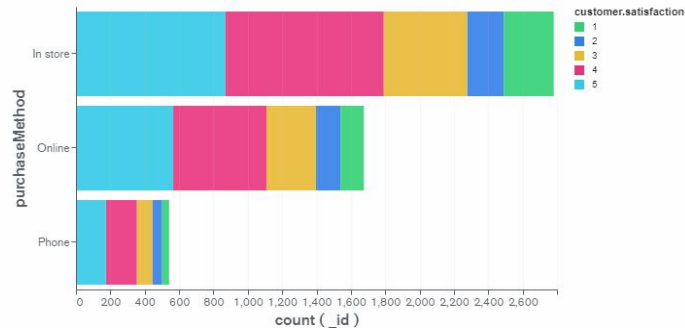
### Customer satisfaction by age



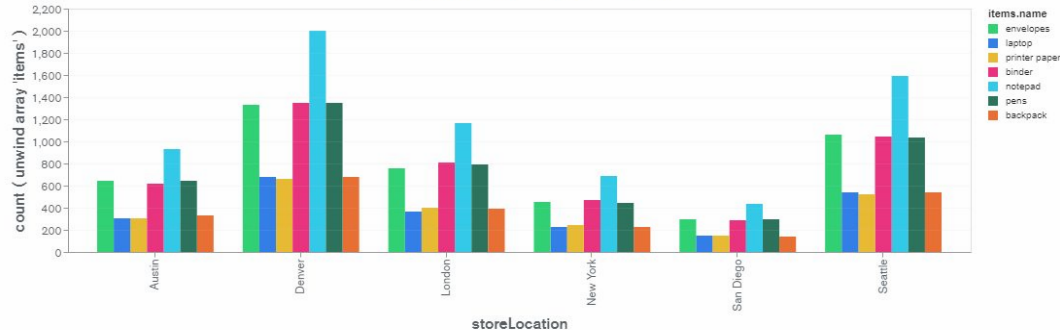
### Distribution of Customer Ages



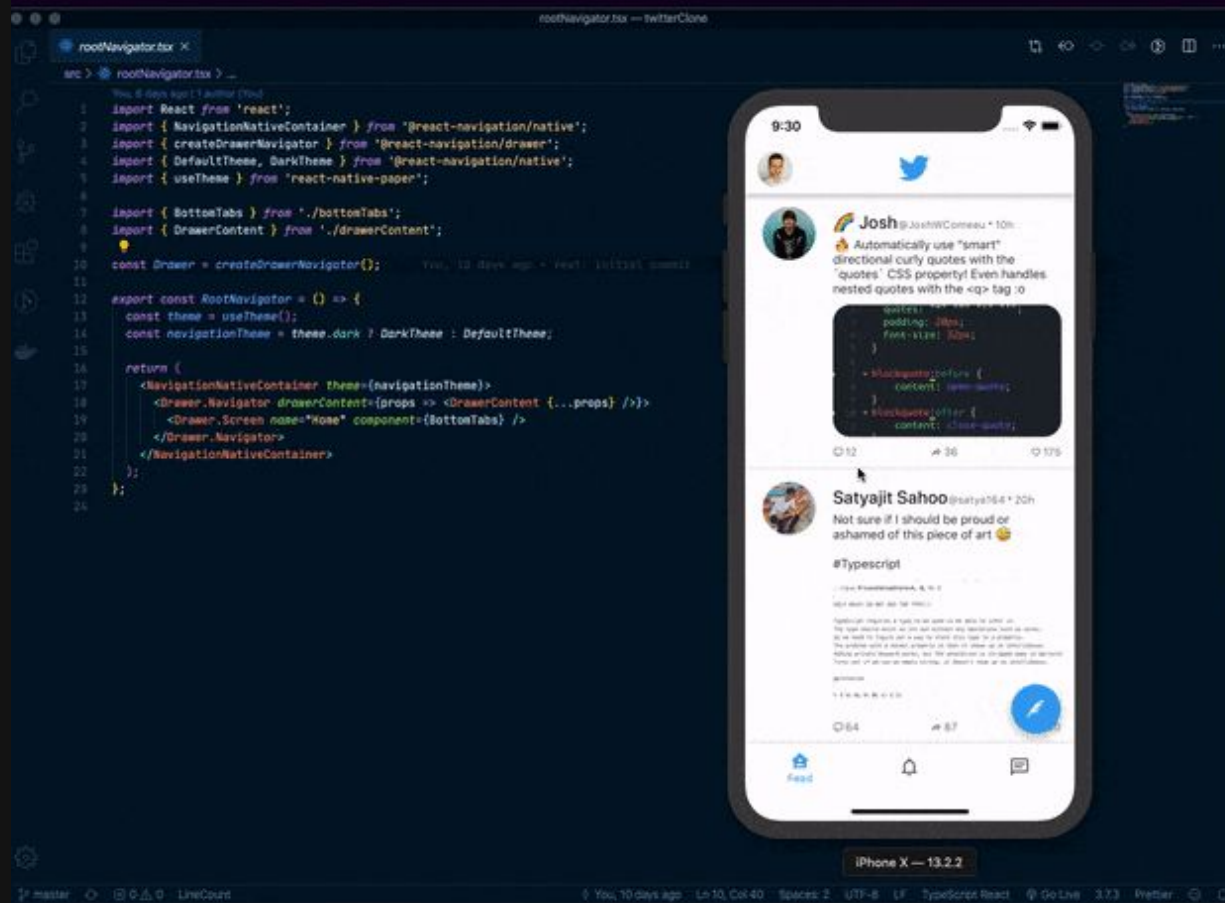
### Sales by purchase method, colored by Satisfaction



### Most common items sold by store location



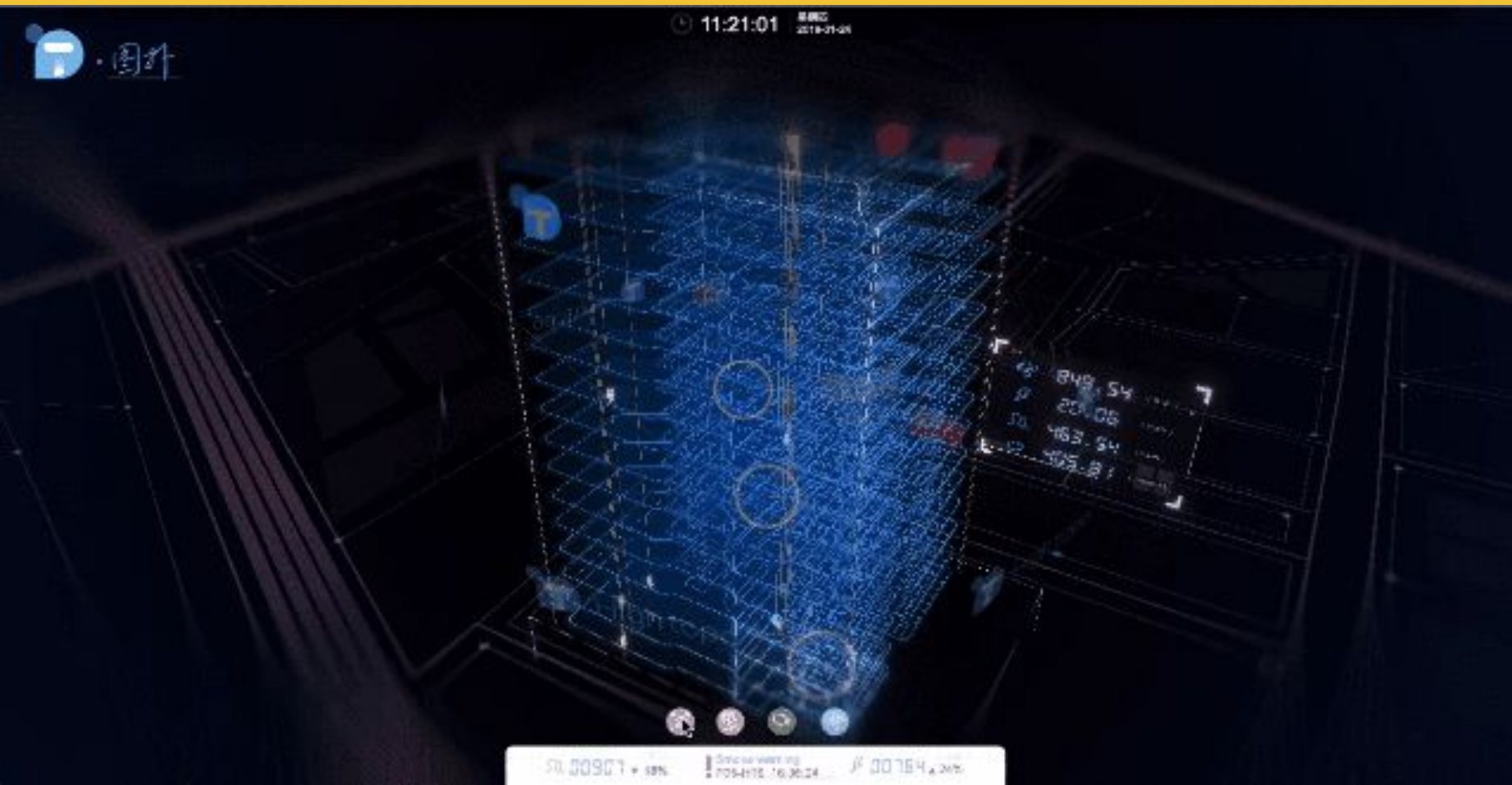
# Aplicativos Mobile



# 3D



11:21:01 星期四 2019-01-24





3dgrid125.json  
3dgrid900.json  
beta\_fleet\_28.json  
grid10k.json  
grid25.json  
net100.json  
net300.json  
✓ smallworld200.json  
Uploaded (125 nodes)  
Upload custom...

3D view

Stats view

FAQ

Graphics: +

Simulation backend:

Host:

TTL:

[Start simulation](#) [Replay](#)

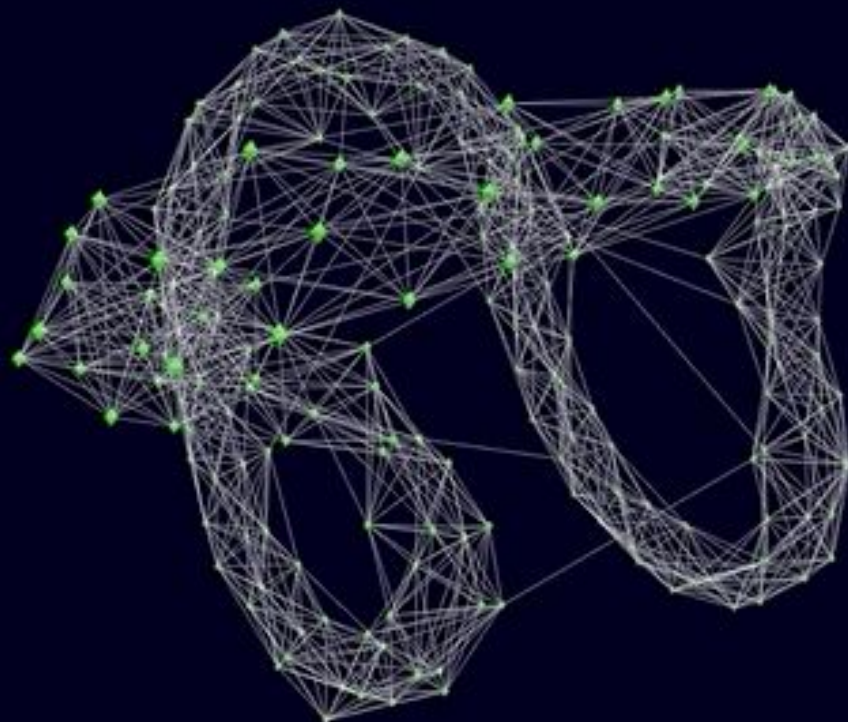
Time

Stats:

Elapsed time: 761ms

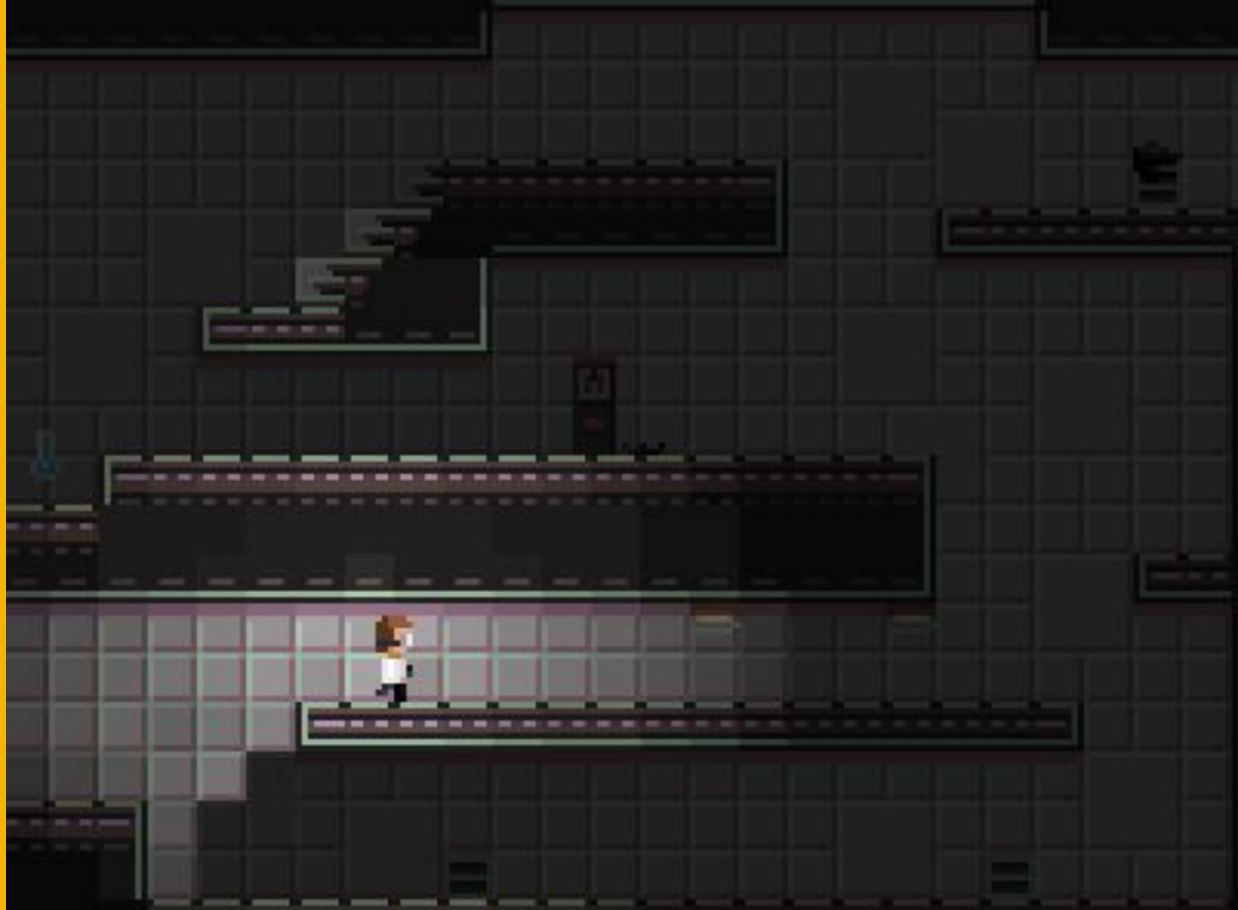
Nodes hit: 200

Links hit: 1400



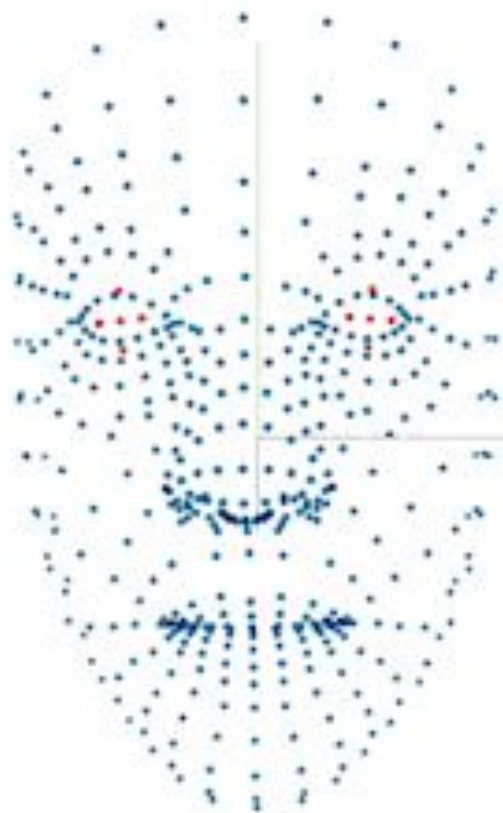
# Game Development

```
ig.module(
  'game.my-file'
)
.requires(
  'impact.game',
  'impact.image',
  'game.other-file'
)
.defines(function(){
  // code for this module
});
```





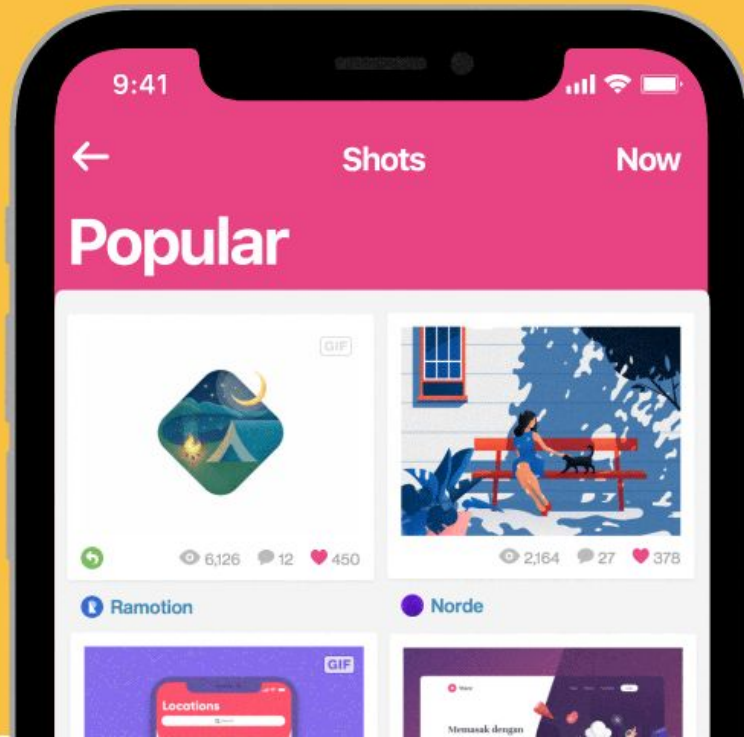
# Inteligência Artificial



# ECMAScript 2020

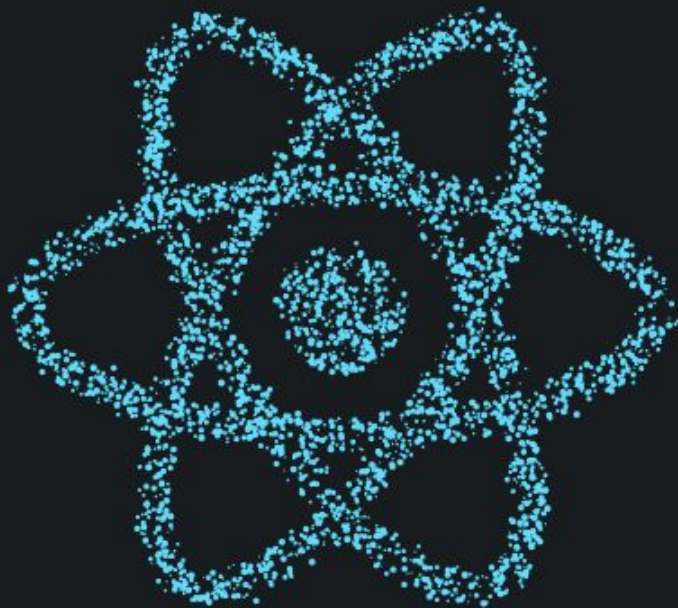


# Frameworks

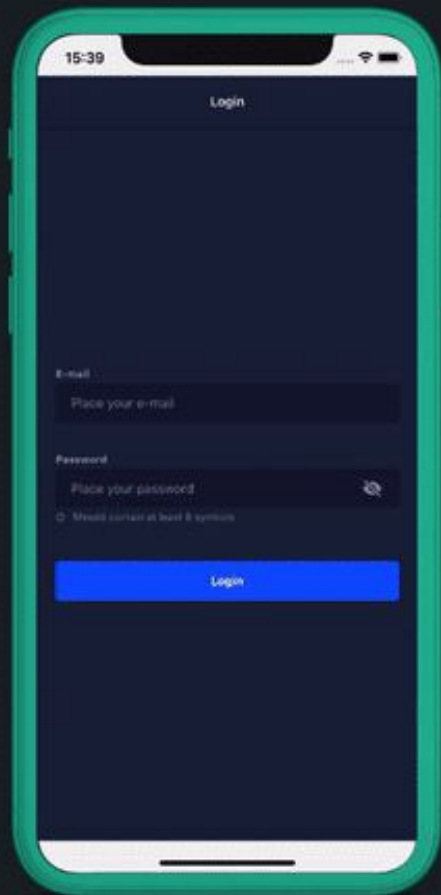


# React JS

```
26
27 const motionForce = (x: number, y: number) => {
28   return forces.disturbance(x, y, 5);
29 };
30
31 export default function App() {
32   const { innerWidth, innerHeight } = useWindowSize();
33
34   return (
35     <ParticleImage
36       src={"/react-logo.png"}
37       width={Number(innerWidth)}
38       height={Number(innerHeight)}
39       scale={0.75}
40       entropy={20}
41       maxParticles={4000}
42       particleOptions={particleOptions}
43       mouseMoveForce={motionForce}
44       touchMoveForce={motionForce}
45       backgroundColor="#191D1F"
46     />
47   );
48 }
```



# React Native



```
juni@MacBook-Pro-de-Joao ~/app/E2ETest$ detox test --configuration ios
detox[16112] INFO: [test.js] node_modules/.bin/mocha --config e2e/.mocharc.json --configuration ios --invert --grep :android: --use-custom-logger "true" e2e

detox[16113] INFO: [DetoxServer.js] server listening on localhost:62002...
detox[16113] INFO: [AppleSimUtils.js] org.reactjs.native.example.E2ETest launched. To watch simulator logs, run:
    /usr/bin/xcrun simctl spawn B6FA79E0-8A3C-4860-B327-F54DEA800646 log stream --level debug --style compact --predicate 'process == "E2ETest"'
```





The official vue-fullpage.js component for Vue.js

# Angular



Dashboard



Bookings

184

⚠ Get More Space...



Views

75.521

📄 Google Analytics



📅 Last 2



Cozy 5 Stars Apartment

The place is close to Barceloneta Beach and bus stop just 2 min by walk and...



Office Studio

The place is close to Metro Station and bus stop just 2 min by walk and near...

# jQuery





# Bootstrap



# Bootstrap 5

# Código

## Calculadora Simples

```
home > user > Desktop > JS TESTE.JS > ...
1  var val1 = Number(prompt("Digite um número \n 0   1   2\n 3   4   5\n 6   7   8\n   9"))
2  var sinal = prompt("Informe o tipo de calculo: \n + \n - ")
3  var val2 = Number(prompt("Digite outro número \n 0   1   2\n 3   4   5\n 6   7   8\n   9"))
4  var resultado = null
5
6  function calcular(){
7  if (sinal == "+") {
8  |   resultado = val1 + val2
9  }
10 if (sinal == "-") {
11 |   resultado = val1 - val2
12 }
13 return resultado
14 }
15 calcular()
16 alert(`${val1} + ${val2} = ${resultado}`)
```

# Código

Felipe

## Calculadora

home > user > Desktop > JS CALCULATOR\_V1.js > ...

```
1 function doOperation(OPERATOR, N1, N2)
2 {
3
4     if (OPERATOR == "+")
5     {
6         return N1 + N2;
7     }
8
9     else if (OPERATOR == "-")
10    {
11        return N1 - N2;
12    }
13
14    else
15    {
16        alert('Operação Inválida');
17    }
18 }
19
20
21 var N1 = null
22 var N2 = null
23 var HISTORY
24 var OPERATOR
25 var CONTINUE
26
```

home > user > Desktop > JS CALCULATOR\_V1.js > ...

```
26
27 do
28 {
29
30     if (N1 == null && N2 == null)
31     {
32
33         N1 = Number(prompt("Digite um valor: \n \n 7 8 9 \n 4 5 6 \n 1 2 3 \n 0"))
34         OPERATOR = prompt("Qual operacao deseja efetuar (+) (-) (*) (/)? : \n");
35         N2 = Number(prompt("Digite outro valor: \n \n 7 8 9 \n 4 5 6 \n 1 2 3 \n 0"))
36
37         alert(`${N1} ${OPERATOR} ${N2} = ${doOperation(OPERATOR,N1,N2)}`)
38     }
39
40     else
41     {
42         OPERATOR = prompt("Qual operacao deseja efetuar (+) (-) (*) (/)? : \n");
43         N2 = Number(prompt("Digite outro valor: \n \n 7 8 9 \n 4 5 6 \n 1 2 3 \n 0"))
44
45         alert(`${N1} ${OPERATOR} ${N2} = ${doOperation(OPERATOR,N1,N2)}`)
46     }
47
48     HISTORY = doOperation(OPERATOR,N1,N2)
49
50
51     CONTINUE = Number(prompt('(1) CONTINUAR (${HISTORY}) \n(2) RESET \n(3) SAIR'))
52
53     switch (CONTINUE)
54     {
55
56
57         case 1:
58             N1 = HISTORY
59             break;
60
61         case 2:
62             N1 = null
63             N2 = null
64             break;
65
66         case 3:
67             alert("Até mais!")
68             break;
69
70         default:
71             alert("Opção Inválida!")
72             break;
73
74     }
75
76 }
77
78 while ([CONTINUE] != 3)
```

< Dev, o JavaScript espera por você! >

