



Who loves JavaScript?

Who hate JavaScript?

Loves
Who ~~works with~~

Ruby, Python, C#, Java?

Ruby, Python, C#, Java

How many of you use
transpilers in production?

Who loves JavaScript?
How many of you use
babel?

A circular portrait of a man with dark hair and glasses, wearing a blue blazer over a black shirt with white text. He is standing in front of a window with a view of a city skyline at sunset. The background is a blurred cityscape with tall buildings and a cloudy sky.

JavaScript

20 years

Picanteverde
(aka Alejandro Hernández)

September 2018

How many time did you saw this?

The Birth & Death of JavaScript

A talk by Gary Bernhardt from PyCon 2014



WebAssembly and the Death of
JavaScript



Mza 1 month ago

Man,not even Cobol is dead yet 😂 h!



8



REPLY



<https://www.destroyallsoftware.com/talks/wat>

<https://www.destroyallsoftware.com/talks/the-birth-and-death-of-javascript>

Remember this?

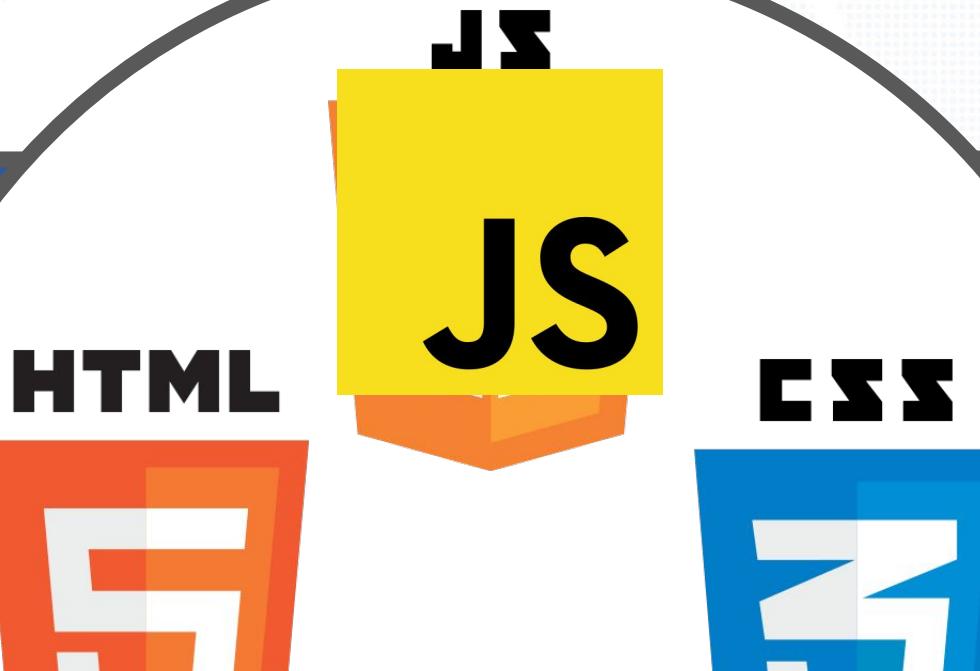


Apps for All



Apps for All

Open Collaboration



PANEL
2018

TC
39



Evolution

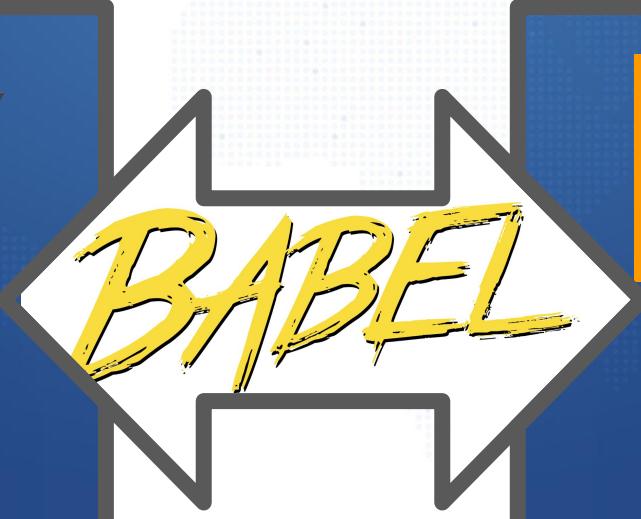




MIND THE GAP



8



BABEL

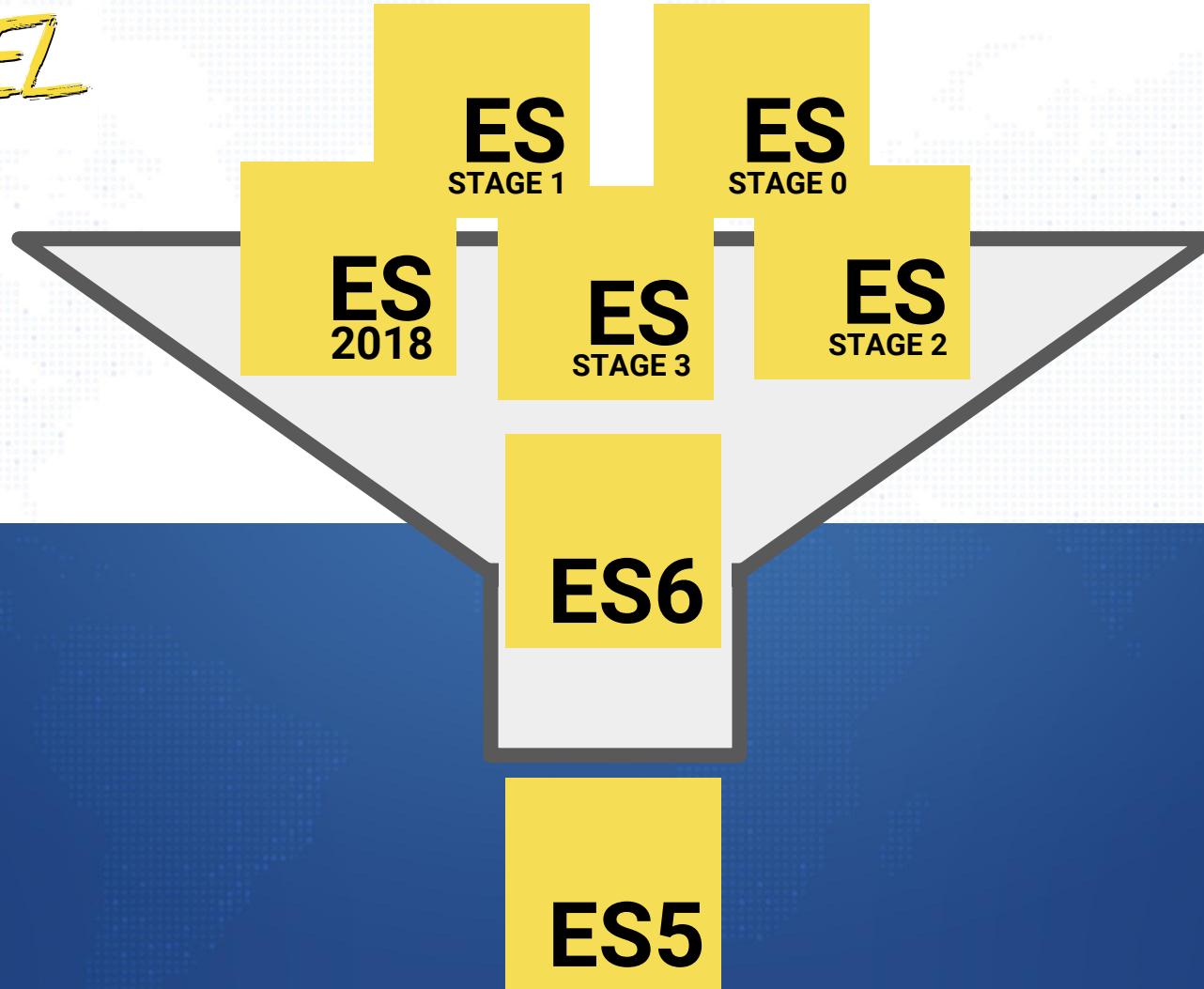


TC
39



ES

BABEL



BABEL

Parse



Compiler

Transform



Generate



Parsing

Lexical Analysis



Tokens

Syntactic Analysis



AST



Parsing

Lexical Analysis

2 + 2 (add 2 2)

4 - 2 (subtract 4 2)

(add 2 (subtract 4 2))

```
{ type: 'paren', value: '(' },
{ type: 'name', value: 'add' },
{ type: 'number', value: '2' },
{ type: 'paren', value: '(' },
{ type: 'name', value: 'subtract' },
{ type: 'number', value: '4' },
{ type: 'number', value: '2' },
{ type: 'paren', value: ')' },
{ type: 'paren', value: ')' }
```



Parsing

```
(add 2 (subtract 4 2))
```

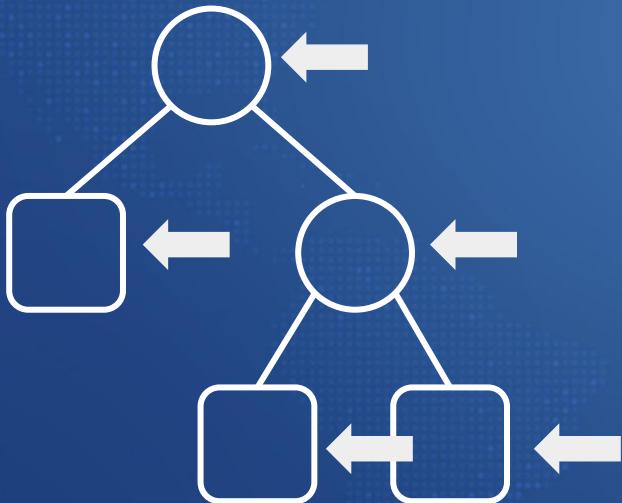
```
{ type: 'paren', value: '(' },
{ type: 'name', value: 'add' },
{ type: 'number', value: '2' },
{ type: 'paren', value: '(' },
{ type: 'name', value: 'subtract' },
{ type: 'number', value: '4' },
{ type: 'number', value: '2' },
{ type: 'paren', value: ')' },
{ type: 'paren', value: ')' }
```

Syntactic Analysis

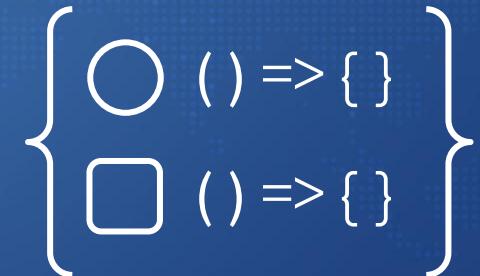
```
{ type: 'Program', body: [
  { type: 'CallExpression', name: 'add', params: [
    { type: 'NumberLiteral', value: '2' },
    { type: 'CallExpression', name: 'subtract', params: [
      { type: 'NumberLiteral', value: '4' },
      { type: 'NumberLiteral', value: '2' }
    ] }
  ] }
]
```

Transform

Transversal

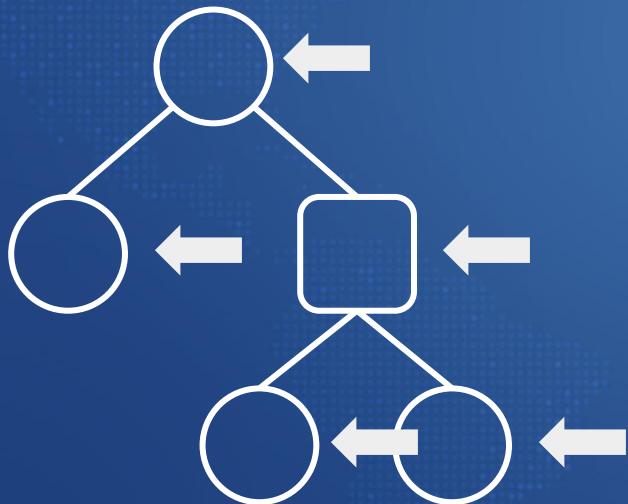


Visitors



BABEL

Generate Recursive .toString()



add (2 , subtract (4, 2))



Plugins

<https://github.com/jamiebuilds/babel-handbook>

<http://astexplorer.net/>

<https://www.sitepoint.com/understanding-asts-building-babel-plugin/>



Babel 7

macros

TypeScript

<https://babeljs.io/blog/2018/08/27/7.0.0>



ES

JavaScript Alternatives

TS TypeScript

Typed superset of JavaScript

Static code analyzer

Popular

<https://slack.engineering/typescript-at-slack-a81307fa288d>

Not a strict superset of JavaScript

Will be integrated in the future

<https://medium.jonasbandi.net/here-is-why-you-might-not-want-to-use-typescript-part-1-alternatives-ec1248bb6dc>

RE ReasonML

New syntax and toolchain

OCaml based

Popular among react users

Not that popular

Huge learning curve



elm

No Runtime Exceptions

Great Performance

Functional Programming

Not that popular

Huge learning curve



clojureScript

Functional language

Great Performance

Rich Hickey

Not that popular

Huge learning curve

Rich Hickey



Rails Conf 2012 Keynote: Simplicity Matters by Rich Hickey

Simplicity matters



The Value of Values with Rich Hickey

The Value of Values

<https://www.youtube.com/watch?v=rI8tNMsozo0>

<https://www.youtube.com/watch?v=-6BsiVyC1kM>

WA webAssembly

Binary format

Several languages

Compiled

Not that popular

Doesn't have Garbage Collector (yet)

Toolchain



Rust

blazingly fast

prevents segfaults

guarantees thread safety.

Yew framework

Like uncle bob says

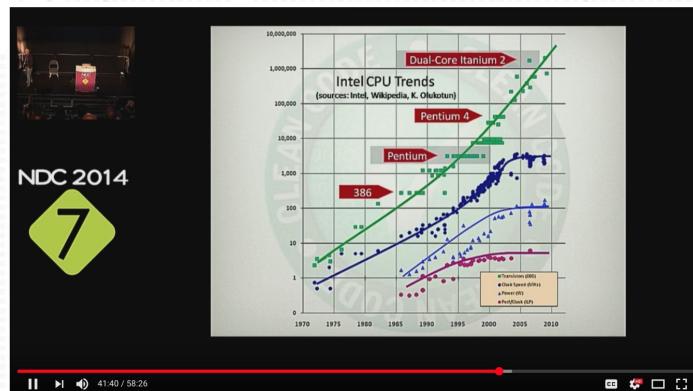
Uncle Bob



'Uncle' Bob Martin - "The Future of Programming"

The Future of Programming

Functional Programming



Robert C Martin - Functional Programming; What? Why? When?

<https://www.youtube.com/watch?v=ecIWPzGEbFc>

<https://www.youtube.com/watch?v=7ZIp9rKHGD4>

Why you should love JavaScript?

Lingua Franca

A wide-angle, aerial photograph of the New York City skyline during sunset. The sky is filled with warm, orange and yellow hues. The city's iconic skyscrapers, including the Chrysler Building, One World Trade Center, and the Empire State Building, are visible against the backdrop of the Hudson River and the distant horizon.

The End

December 2017