

Introduction to *CoffeeScript*



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What is CoffeeScript?

“CoffeeScript is a little language that
compiles into JavaScript”

<http://coffeescript.org>

Type CoffeeScript
Code

```
file: hello.coffee
-----
alert 'Hello World!'
```

Compile to
JavaScript

```
> coffee -c hello.coffee

file: hello.js
-----
alert('Hello World!');
```

Reference
JavaScript
in HTML

```
file: index.html
-----
<script
type="text/javascript" src="hello.js">
</script>
```

“CoffeeScript is an attempt to expose the good parts of JavaScript in a simple way.”

<http://coffeescript.org>

What's wrong with this code?

```
function priceWithTax(price, tax) {  
    return price + (price * (tax / 100));  
}
```

```
price = 100;  
tax = 6.5;  
total = priceWithTax(price, tax);
```

```
alert("Total = " + total);
```

var not
used

What happens if another
priceWithTax function
already exists?

Same Code in CoffeeScript

```
priceWithTax = (price, tax) ->  
  price + (price * (tax/100))
```

```
price = 100  
tax = 12  
total = priceWithTax(price, tax)  
  
alert "Total = #{total}"
```

JavaScript generated by CoffeeScript

```
(function() {  
  var price, priceWithTax, tax, total;  
  
  priceWithTax = function(price, tax) {  
    return price + (price * (tax / 100));  
  };  
  
  price = 100;  
  tax = 12;  
  total = priceWithTax(price, tax);  
  
  alert("Total = " + total);  
  
}).call(this);
```

All variables
are declared
(including the
function)

Local
scope
has been
defined
(module
pattern)

The golden rule of CoffeeScript is:

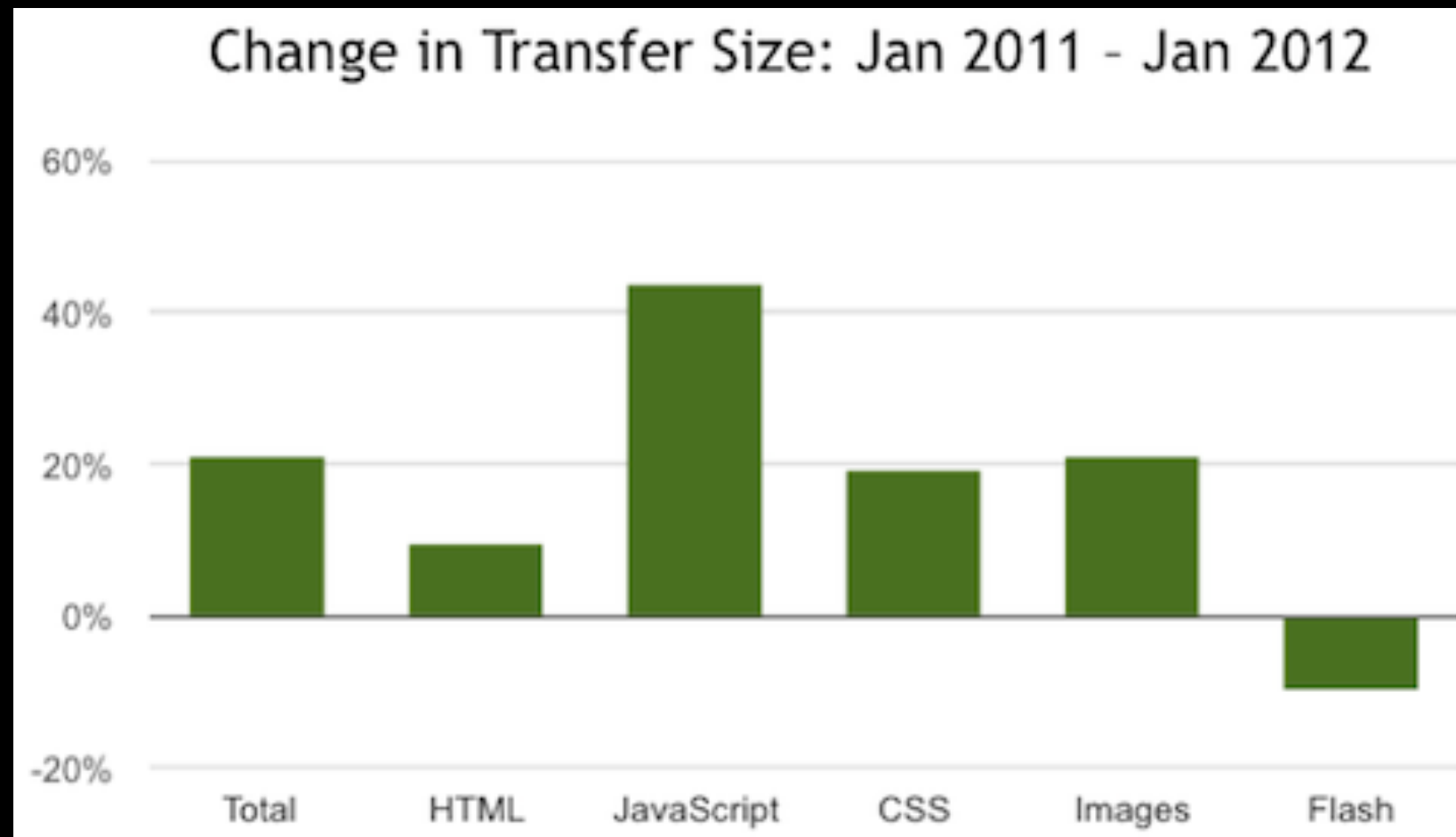
“It’s just JavaScript”

<http://coffeescript.org>

Why CoffeeScript?

JavaScript development will
continue to grow...

JavaScript Growth



“tremendous growth in JavaScript size – up 44% over the course of the year”

<http://www.stevesouders.com/blog/2012/02/01/http-archive-2011-recap/>

CoffeeScript is a great way to manage this growth

- Write less code
- Clean and concise syntax
- Easier to write good code
- Produces correct JavaScript (“the good parts”)

Show me the code

<https://github.com/hectorcorrea/intro-to-coffeescript>

Language Features

- Syntactic sugar
- Classes
- Other features

Syntactic Sugar

- Functions (declaration, callbacks, default arguments)
- Significant white space, string interpolation, equality operator
- Existential and soak operators
- Bare objects
- Bound functions =>

Classes

- Classes
- Default arguments
- Bound methods
- Inheritance

Gotchas

- Significant space will trip you initially
- Debugging
- It's not a framework, it does not give structure to your project

tl;dr

CoffeeScript allows you to write
less, cleaner, and better code

More Information

- Visit <http://coffeescript.org>
- **Book:** CoffeeScript Accelerated JavaScript Development by Trevor Burnham (The Pragmatic Programmers)
- **Code Examples:** <https://github.com/hectorcorrea/intro-to-coffeescript>



Thanks

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