CoffeeScript

JavaScript's Less Ostentatious Kid Brother

Ryan McGeary
http://ryan.mcgeary.org
@rmm5t

CoffeeScript

JavaScript's less **ostentatious** *kid brother*

|ˌästənˈtāSHəs| *adjective*

characterized by vulgar or pretentious
display; designed to impress or
attract notice

DERIVATIVES
os•ten•ta•tious•ly adverb
Dictionary ▾   More..

Jeremy Ashkenas

http://jashkenas.github.com/coffee-script/

CoffeeScript
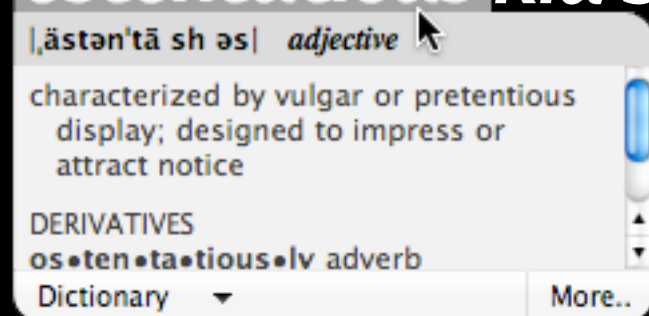
Jeremy Ashkenas

JavaScript's less
ostentatious kid brother

one-to-one
with JavaScript

better
functional syntax

compiles to
the good parts

http://jashkenas.github.com/coffee-script/

```javascript
if (typeof elvis !== "undefined" && elvis !== null) {
  alert("I knew it!");
}
```

JavaScript

```javascript
var cube, square;
square = function(x) {
  return x * x;
};
cube = function(x) {
  return square(x) * x;
};
```

JavaScript

```coffeescript
square = (x) -> x * x
cube   = (x) -> square(x) * x
```

```javascript
var _i, _len, _ref, _result, food, lunch;
lunch = (function() {
  _result = []; _ref = ['toast', 'cheese', 'wine'];
  for (_i = 0, _len = _ref.length; _i < _len; _i++) {
    food = _ref[_i];
    _result.push(eat(food));
  }
  return _result;
})();
```

JavaScript

```coffeescript
lunch = eat food for food in ['toast', 'cheese', 'wine']
```

CoffeeScript

```javascript
var _i, _j, _len, _len2, _ref, _ref2, roid, roid2;
_ref = asteroids;
for (_i = 0, _len = _ref.length; _i < _len; _i++) {
  roid = _ref[_i];
  _ref2 = asteroids;
  for (_j = 0, _len2 = _ref2.length; _j < _len2; _j++) {
    roid2 = _ref2[_j];
    if (roid !== roid2) {
      if (roid.overlaps(roid2)) {
        roid.explode();
      }
    }
  }
}
```

JavaScript

```coffeescript
for roid in asteroids
  for roid2 in asteroids when roid isnt roid2
    roid.explode() if roid.overlaps roid2
```

Installation

```
$ brew install npm

# Add /usr/local/share/npm/bin to PATH

$ npm install coffee-script
```

Usage

```
$ coffee -c path/to/script.coffee

$ coffee --watch experimental.coffee

$ coffee --print *.coffee > all.js
```

Significant Whitespace

```
if happy and knowsIt
    clapsHands()
    chaChaCha()
else
    showIt()
```

Functions

```
square = (x) -> x * x

area = (x, y) -> x * y

noop = ->
```

Objects

```
kids =
  brother:
    name: "Max"
    age:  11
  sister:
    name: "Ida"
    age:  9
```

»»»

```
var kids;
kids = {
  brother: {
    name: "Max",
    age: 11
  },
  sister: {
    name: "Ida",
    age: 9
  }
};
```

Lexical Scoping / Variable Safety

```
outer = 1
change = ->
  inner = -1
  outer = 10
inner = change()
```

»»

```
(function() {
  var change, inner, outer;
  outer = 1;
  change = function() {
    var inner;
    inner = -1;
    return (outer = 10);
  };
  inner = change();
}).call(this);
```

OOP

```
class Animal
  constructor: (@name) ->

  move: (meters) ->
    alert @name + " moved " + meters + "m."

class Snake extends Animal
  move: ->
    alert "Slithering..."
    super 5

sam = new Snake "Sammy the Python"
sam.move()
```

Pattern Matching

```
theBait   = 1000
theSwitch = 0

[theBait, theSwitch] = [theSwitch, theBait]

            _____


weatherReport = (location) ->
    [location, 72, "Mostly Sunny"]

[zip, temp, forecast] = weatherReport "20175"
```

The Rest...

✓ Existential operator

✓ Pattern matching with object literals

✓ Switch/When/Else

✓ Chained comparison

✓ Splat arguments

✓ Python style array comprehension

✓ Array slicing and splicing with ranges

✓ Everything is an expression; always a return value

✓ Function binding syntactical sugar

✓ String and RegExp Interpolation

✓ Multiline Strings, Heredocs, and Block Comments

✓ "text/coffeescript" script tags with extras/coffee-script.js

http://jashkenas.github.com/coffee-script/

Ideas for Getting Started

QUnit
jQuery

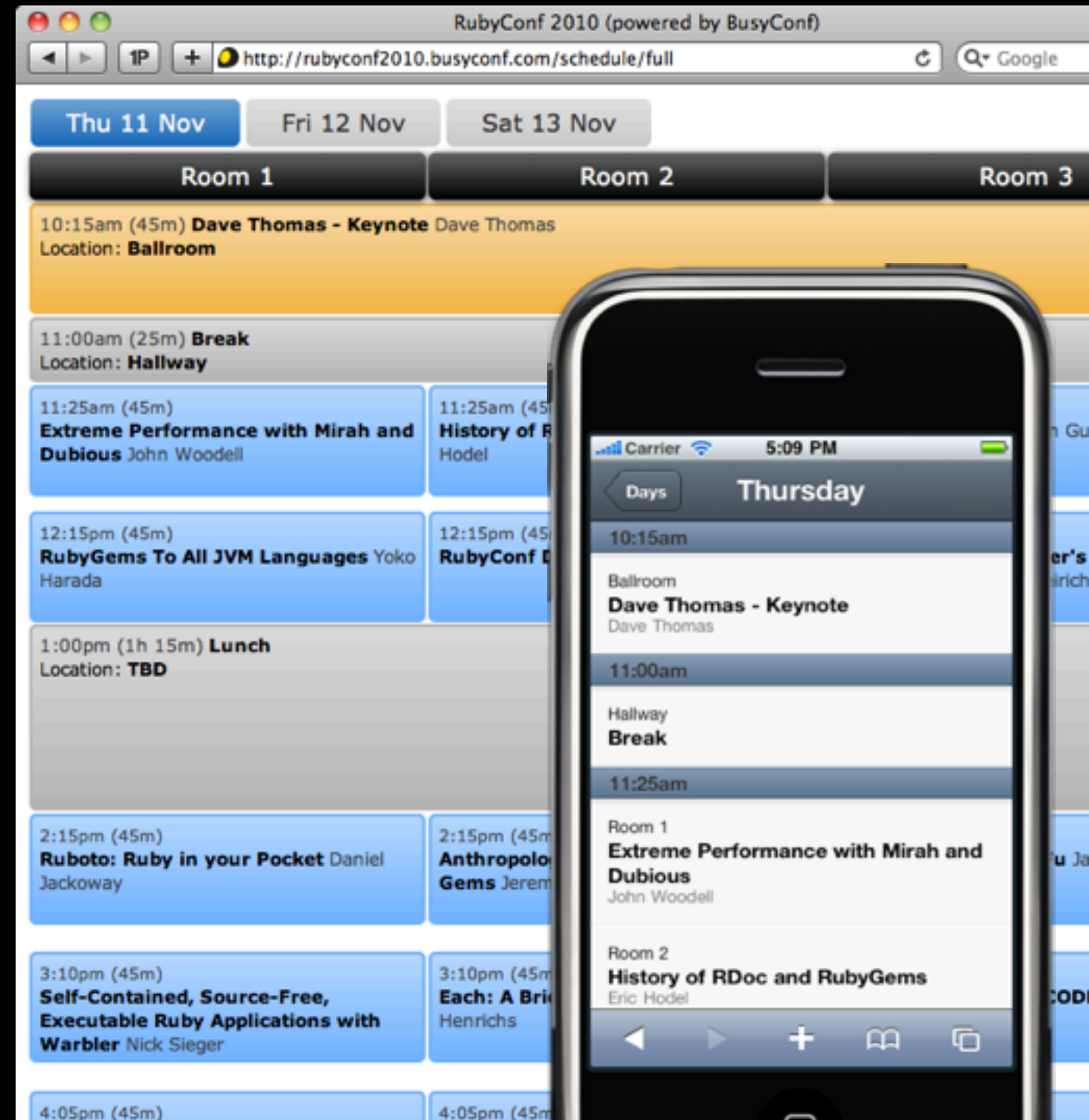timeago
a jQuery plugin

Jasmine

flexselect
a jQuery plugin

let me Google that for you

Currently In Use

*Making great
conferences even better*

busyconf.com

Ryan McGeary

http://ryan.mcgeary.org

@rmm5t

ryan@mcgeary.org

E=mc^g

McGeary Consulting Group

Attributions

http://jashkenas.github.com/coffee-script/

http://www.flickr.com/photos/74234765@N00/488955057/

http://www.flickr.com/photos/adunne/3974874247/

http://www.flickr.com/photos/28111377@N07/2970550798/

http://www.flickr.com/photos/7678790@N06/3380560365/

http://www.flickr.com/photos/40775750@N00/531138641/

http://www.flickr.com/photos/86176561@N00/492795782/

http://www.flickr.com/photos/77555797@N00/133942287/

http://www.flickr.com/photos/34580986@N03/4985041197/

http://www.flickr.com/photos/83275741@N00/291831432/

http://www.flickr.com/photos/58115002@N00/3283033324/

http://www.flickr.com/photos/15133799@N02/3339157498/

http://www.flickr.com/photos/17731548@N00/981372736/