Underscore.js Fundamentals

Craig Shoemaker

http://craigshoemaker.net

@craigshoemaker

Tip

Spend time with the annotated source.

Underscore is an open-source component of DocumentCloud.

DocumentCloud

http://documentcloud.org

```
(function() {

var root = this;


var previousUnderscore = root._;


var breaker = {};


var ArrayProto = Array.prototype, ObjProto = Object.prototype, FuncProto = Function.prototype;

var push          = ArrayProto.push,
    slice         = ArrayProto.slice,
    concat        = ArrayProto.concat,
    toString      = ObjProto.toString,
    hasOwnProperty = ObjProto.hasOwnProperty;


var
    nativeForEach      = ArrayProto.forEach,
    nativeMap          = ArrayProto.map,
    nativeReduce       = ArrayProto.reduce,
    nativeReduceRight  = ArrayProto.reduceRight,
    nativeFilter       = ArrayProto.filter,
    nativeEvery        = ArrayProto.every,
    nativeSome         = ArrayProto.some,
    nativeIndexOf      = ArrayProto.indexOf,
    nativeLastIndexOf  = ArrayProto.lastIndexOf,
    nativeIsArray      = Array.isArray,
    nativeKeys         = Object.keys,
```

Why Underscore.js?

Have you ever wanted to…

apply a function over each item in a collection?

Have you ever wanted to…

transform an array into a new form?

Have you ever wanted to…

filter a JavaScript collection?

ensure a function was only called once?

extract just the keys from an object literal?

extract just the values from an object literal?

Have you ever wanted to…

improve the performance of your code?

That's…

why Underscore.js!

but…

What is Underscore.js?

> Underscore provides 80-odd functions that support both the usual functional suspects: map, select, invoke — as well as more specialized helpers: function binding, JavaScript templating, deep equality testing, and so on.
>
> http://underscorejs.org

Falls back to native implementations…

ECMA Script

ECMA Script 5

Array
forEach
map
reduce
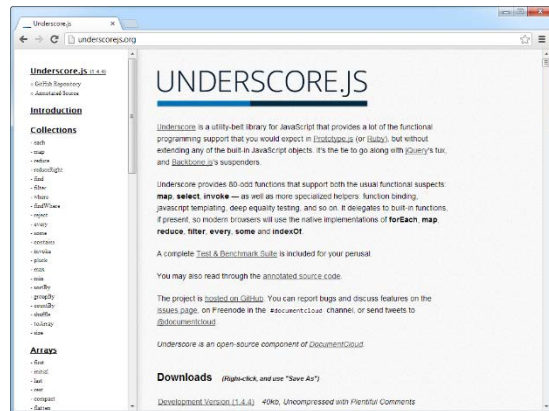reduceRight
filter
every
some
indexOf
lastIndexOf
isArray

Object
keys

Function
bind

Works in different environments…

Works with many different libraries…

Backbone.js Fundamentals

Backbone.js is a set of tools that gives structure to client-side web applications. It helps us write clean, maintainable JavaScript applications.

Liam McLennan

http://pluralsight.com/courses/backbone-fundamentals

ore is] the tie to go h jQuery's tux, and e.js's suspenders.

http://underscorejs.org

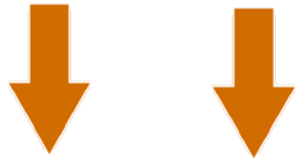**Underscore allows you to choose your coding style…**

Functional & Object Oriented

…but mostly functional :)

Functional:

```
var m = _.map(names, function(name) {
    return 'Hello: ' + name;
});
```

Object Oriented:

```
var m = _(names).map(function(name) {
    return 'Hello: ' + name;
});
```

How do I get

Underscore.js?

Resources

▶ **JavaScript Fundamentals**
Liam McLennan
http://pluralsight.com/courses/jscript-fundamentals

▶ **Structuring JavaScript Code**
Dan Wahlin
http://pluralsight.com/courses/structuring-javascript

Summary

```javascript
var m = _.map(names, function(name) {
    return 'Hello: ' + name;
});
```

Next Up....

Collections