## Jasmine

z Kawą

## Biblioteki









## Co chcemy osiągnąć

Celem jest zapoznanie się z bibliotekami umożliwiającymi mniej problemowe i bardziej radosne rzeźbienie kodu w JavaScript, w oparciu o metodykę Test Driven Development.





CoffeeScript napisany jest w ... CoffeeScript za pomocą parsera Jison.

Kompilowamy do JS poprzez NodeJs lub w przeglądarce.

Składnia zbliżona do Ruby.

sudo npm install -g coffee-script

UWAGA! Wcięcia mają znaczenie.



### Funkcje

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

```
square = function(x) {
  return x * x;
};
```

#### Klasa

```
class RecipeEntry
 @TYP: "meal"
 constructor: (@name) ->
 save: (id) ->
       alert "zostal zapisany wpis typu #{@TYP} o nazwie #
{@name}"
 publish: (id) ->
       alert "zostal opublikowany wpis typu #{@TYP} o nazwie
#{@name} o id #{id}"
nw = new RecipeEntry "meal1"
nw.TYP = 'meal'
nw.save()
nw.publish(12)
```

```
var RecipeEntry, nw;
RecipeEntry = (function() {
 RecipeEntry.TYP = "meal";
 function RecipeEntry(name) {
  this.name = name;
 RecipeEntry.prototype.save = function(id) {
  return alert("zostal zapisany wpis typu " + this.TYP + " o nazwie " +
this.name);
 };
 RecipeEntry.prototype.publish = function(id) {
  return alert("zostal opublikowany wpis typu " + this.TYP + " o nazwie
" + this.name + " o id " + id);
 return RecipeEntry;
})();
nw = new RecipeEntry("meal1");
nw.TYP = 'meal';
nw.save();
nw.publish(12);
```



### Konkatenacja ciągów i zmiennych

```
author = "Wittgenstein"
quote = "A picture is a fact. -- #{ author }"
sentence = "#{ 22 / 7 } is a decent approximation of π"
```

```
var author, quote, sentence;
author = "Wittgenstein";
quote = "A picture is a fact. -- " + author;
sentence = "" + (22 / 7) + " is a decent approximation of π";
```



### Instrukcje warunkowe

```
alert "I knew it!" if elvis?
```

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

### Instrukcje warunkowe

```
mood = greatlyImproved if singing
if happy and knowsIt
 clapsHands()
 chaChaCha()
else
 showIt()
date = if friday then sue else jill
```

```
var date, mood;
if (singing) {
 mood = greatlyImproved;
if (happy && knowsIt) {
 clapsHands();
 chaChaCha();
} else {
 showIt();
date = friday ? sue : jill;
```

#### Pętle

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

foods = ['broccoli', 'spinach', 'chocolate']
eat food for food in foods when food isnt 'chocolate'
```

```
var courses, dish, food, foods, i, _i, _j, _k, _len, _len1,
_len2, _ref;
_ref = ['toast', 'cheese', 'wine'];
for (_i = 0, _len = _ref.length; _i < _len; _i++) {
food = _ref[_i];
 eat(food);
foods = ['broccoli', 'spinach', 'chocolate'];
for (_k = 0, _len2 = foods.length; _k < _len2; _k++) {
 food = foods[_k];
 if (food !== 'chocolate') {
  eat(food);
```

#### Switch

```
switch day
 when "Mon" then go work
 when "Tue" then go relax
 when "Thu" then go iceFishing
 when "Fri", "Sat"
  if day is bingoDay
   go bingo
   go dancing
 when "Sun" then go church
 else go work
```

```
switch (day) {
 case "Mon":
  go(work);
  break;
 case "Tue":
  go(relax);
  break;
 case "Thu":
  go(iceFishing);
  break;
 case "Fri":
 case "Sat":
  if (day === bingoDay) {
   go(bingo);
    go(dancing);
  break;
 case "Sun":
  go(church);
  break;
 default:
  go(work);
```



#### Html

```
html = """

<strong>
cup of coffeescript

</strong>
"""
```

```
var html;
html = "<strong>\n cup of coffeescript\n</strong>";
```

### jQuery

```
#Using $j instead of just $ to be more specific
j = jQuery
#Storing page elements to local variables
clickme = $j '#ani1_clickme'
restore = $j '#ani1_restore'
bar1 = $j '#ani1_bar1'
bar2 = $j '#ani1_bar2'
#Cool shortcut, instead of $j(document).ready(function(){
$j ->
  clickme.click ->
    bar1.animate {width:150}, 2000
    bar2.animate {width:350}, 4000
  restore.click ->
    bar1.animate {width:350}, 4000
    bar2.animate {width:150}, 2000
```

### Zalety:

- □ mniej kodu
- □ kod jest bardziej czytelny

### Wady:

- z powodu braku braces {} kod może stać się nieczytelny
- utrzeba poświęcić na początku czas na naukę składni



```
test = {}
beforeEach ->
test.basket = new Basket()
test.item = new Item 1001, "Macbook Air", "Superb computer", 799
item2 = new Item 1002, "Magic TrackPad", "Better than a mouse", 50
test.basket.add item2, 1
describe "MyBasket Class", ->
describe "MyBasket", ->
          it "should be able to add item to a basket", ->
           # given
           priorCountVal = test.basket.distinctCount
           # when
           test.basket.add test.item. 1
           # then
           expect(test.basket.distinctCount).toEqual priorCountVal + 1
```



```
it "should be able to update quantity when adding an item already in the basket", ->
          # given
          priorCountVal = test.basket.getQuantity(1001)
          # when
         test.basket.add test.item, 1
          # then
          expect(test.basket.getQuantity(1001)).toEqual priorCountVal + 1
describe "getSpecificQuantityForItem", ->
         it "should be falsy for unknown item", ->
          # when
          spQ4Item = test.basket.getSpecificQuantityForItem 12345
          # then
          expect(spQ4Item).toBeFalsy()
          it "should return false if we pass string instead of an item", ->
          # when
         spQ4Item = test.basket.getSpecificQuantityForItem "sfkjshdfkjhsd"
          # then
         expect(spQ4Item).toBeFalsy()
```

### Odnośniki

#### CoffeeScript

http://coffeescript.org

http://js2coffee.org

http://grails.org/plugin/coffee-asset-pipeline

https://efendibooks.com/minibooks/testing-with-coffeescript

http://coffeequery.blogspot.com/2012/01/lesson-1-jquery-animations-are.html

http://coffeescriptcookbook.com

#### Jasmine

http://jasmine.github.io

http://coffeescriptcookbook.com/chapters/testing\_with\_jasmine

#### Karma

http://karma-runner.github.io