



# BDD in the Browser

@aaronbassett – rawtech.io



**@aaronbassett**



@rawtechio



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@aaronbassett – rawtech.io





# Ruby on Rails

Sustainable productivity for web-application development





**TDD is**

**DEAD**



“I think that's the direction we're heading. Less emphasis on unit tests, because we're no longer doing test-first as a design practice, and more emphasis on, yes, slow, system tests.”

– <http://david.heinemeierhansson.com/2014/tdd-is-dead-long-live-testing.html>

**THE**

**DHHA**

**PROBLEM**

[codon.com/the-dhh-problem](https://codon.com/the-dhh-problem)



**BORING**



# Having fun with testing.

@aaronbassett – rawtech.io







6. /Users/aaronbassett? (bash)

(env)repo on master\*

\$ time python tests.py

.....  
.....  
-----

Ran 193 tests in 278.417s

OK

real 4m38.684s

user 0m0.163s

sys 0m0.071s

(env)repo on master\*

\$ █



6. /Users/aaronbassett? (bash)

(env)repo on master\*

\$ time python tests.py

```
F.E.FE.FFFEFE.E..EFEE..FEEFF..EE.E.FFF.FFFFEEFE..E.FFFFF.FF.EF.F..F.FFFE..FF.E.FEEF.FFFFFFFE.FFFFFFFEF.FFEFF.EF
E..FFF..F..FFFFFFFFFFFF..FE.FFFFE.EFF.FF.EF.EEFFF.F.FF..EF...F.F.EF.FFF.FF.EEFFFFFF.FFF...E..FE.EFF..FFFF.F.FF.
F.FFFFFFFFFFFFF.FFEEFF.FFF..F..F.F.FFEEF.E..FEE.EFF.FFEFEFFF.FFEE.F.FEF..F..F.FFEFFFF.FFF..FFF.FFF.EFFFEEFF.FF.EE
FF.FFFF..FF.FFF...F.FFF..F.EFE..EFFEFFF.FE..FEFFF..FFFEEFFFFFF.FEEFE.E...F.FFFFF.F.F.EFF.FFEFEFFF..FEFFFF
FFFFFF.EF..FF.FFEEFE...FFF.EE..FFFFFFFF..FFFFFFFF.EF..FEE..FF.F...E.FFF.FF.E.FFFFF.E.FE.FFFFFFFFF.FFF.E.EFFFF
E..FFFFE...F..FEFFFFFFE.F..FFFFFFFF.FF.FEFF.F.E.FE..FFFFFFFFEFFFFFFEF.F.FFEF.FE..FF.FF...EFFF.FE.FFFFF..EFFEEF.FF
.F.FFF.FF.FEFF.EF...E.EFFF...FFFFFFFF..FFFFFFEF.FFF.FFFFEE.FEF.F.FF..EF.FE.FE..FEEE..EFFF.FFFFFFF..F.EFFF.FF
FFFFFFFF.EFFF.FE..FEFF.F.FFF.EFFFFFFFF.FFEE.F.F..F..EEF..FFF.F.E...FFFF..FFEFFFFFFEEF.FEEFFF.FFEEFEEFFF..
FFF.F..FEEFFE.FFEEFFEFF.FFFF...F.FEFFF.F.EFEF..FFFFFFFF.FE.FFEEFEFEFF...EFFF.E.FFEFFF.FE
```



6. /Users/aaronbassett? (bash)

```
$ time nosetests --rednose tests.py
```

```
F.X.FX.FFFXF.X..XFFX..FXXFF..XX.X.FFF.FFFFXF.FX..X.FFFFF.FF.XF.F..F.FFFX..FF.  
X.FXXF.FFFFFFFX.FFFFFFFX.FFXFF.XFX..FFF..F..FFFFFFFFFFFFFF..FX.FFFF.XFF.FF.XF.  
XXFFF.F.FF..XF...F.F.XF.FFF.FF.XXFFFFFF.FFF...X..FX.XFF..FFFF.F.FF.F.FFFFFFFF  
FF.FFFXF.FFF..F..F.F.FFFXF.X..FXX.XFF.FFXFXFFF.FFXX.F.FXF..F..F.FFXFFF.FFF.  
.FFF.FFF.XFFFXF.FF.XXFF.FFFF..FF.FFF...F.FFF..F.XFX..XFFFXF.FX..FXFFF..FF  
FXXXXXXXX.FXXF.X...F.FFFF.F.F.XFF.FFXFXFFF..FXFFFFFFFF.XF..FF.FFXFXF..  
.FFF.XX..FFFFFFFF..FFFFFFFF.XF..FXX..FF.F...X.FFF.FF.X.FFFF.X.FX.FFFFFFFFFF.  
FFF.X.XFFFFX..FFFFX...F..FXFFFFFFX.F..FFFFFF.FF.FXFF.F.X.FX..FFFFFFXFFFFFFX  
.F.FFXF.FX..FF.FF...XFFF.FX.FFFF..XFFXF.FF.F.FFF.FF.FXFF.XF...X.XFFF...FF  
FFXXXXF..FFFFFFX.FFF.FFFFXX.FXF.F.FF..XF.FX.FX..FXXX..XFFF.FFFFFF..F.XFFF.FF  
FFFFFFX.XFFXF.FX..FXFF.F.FFF.XXXXXXXXXX.FFFXX.F.F..F..XXF..FFF.F.X...FFFF..F  
FXXXXXXXXX.FXXXFFF.FFXFXFFF..FFF.F..FXXFFF.FFXFXFFF.FFFF...F.FXFFF.F  
.XFXF..FFFFFFFF.FX.FFXFXFFF...XFFF.X.FFXFFF.FX
```



mocha

mochajs.org

```
6. /Users/aaronbassett? (bash)
jstest on master*
$ mocha -R dot

.....

320 passing (61ms)

jstest on master*
$ █
```



```
$ mocha -R dot
```

```
.....  
.....  
.....  
.....
```

319 passing (62ms)

1 failing

1) Array #indexOf() should return -1 when the value is not present:

AssertionError: expected 0 to be -1  
+ expected - actual

-0

+-1

at Context.<anonymous> (test/tests.js:1924:33)

jstest on master\*

```
$ █
```



```
6. /Users/aaronbasset? (bash)
jstest on master*
$ mocha -R progress

[-----]

320 passing (61ms)

jstest on master*
$ █
```

```
6. /Users/aaronbassett? (bash)
jstest on master*
$ mocha -R landing

-----
.....
-----

320 passing (153ms)

jstest on master*
$ █
```

6. /Users/aaronbassett? (bash)

jstest on master\*

\$ mocha -R landing

```
-----  
.....  
-----
```

319 passing (166ms)

1 failing

1) Array #indexOf() should return -1 when the value is not present:

AssertionError: expected 0 to be -1  
+ expected - actual

-0

+-1

at Context.<anonymous> (test/tests.js:2008:33)

jstest on master\*

\$ █

6. /Users/aaronbassett? (bash)

jstest on master\*

\$ mocha -R nyan

```
320 -----,-----,
0 -----| ^ ^
0 -----^|_ ( ^ .^ )
----- "" ""
```

320 passing (423ms)

jstest on master\*

\$ █

```
1 before(function() {
2     exec("afplay /Codepen/jstest/nyan.mp3");
3 });
4
5 after(function() {
6     exec("killall afplay");
7 });
```



**imagesnap**



6. /Users/aaronbassett? (bash)

**pics** on master\*

\$ imagesnap

Capturing image from device "FaceTime HD Camera"...snapshot.jpg

**pics** on master\*

\$ █



```
mocha | | (imagesnap pic.png && exit 1)
```















`$ (date +%y%m%d%H%M%S) .png`

```
mocha -R nyan -t 4000 ||  
( imagesnap ~/Pictures/FAIL/$  
(date +%y%m%d%H%M%S) .png &&  
  exit 1 )
```

```
1 test:
2     mocha ... # Our super long command
3
4 .PHONY: test
```

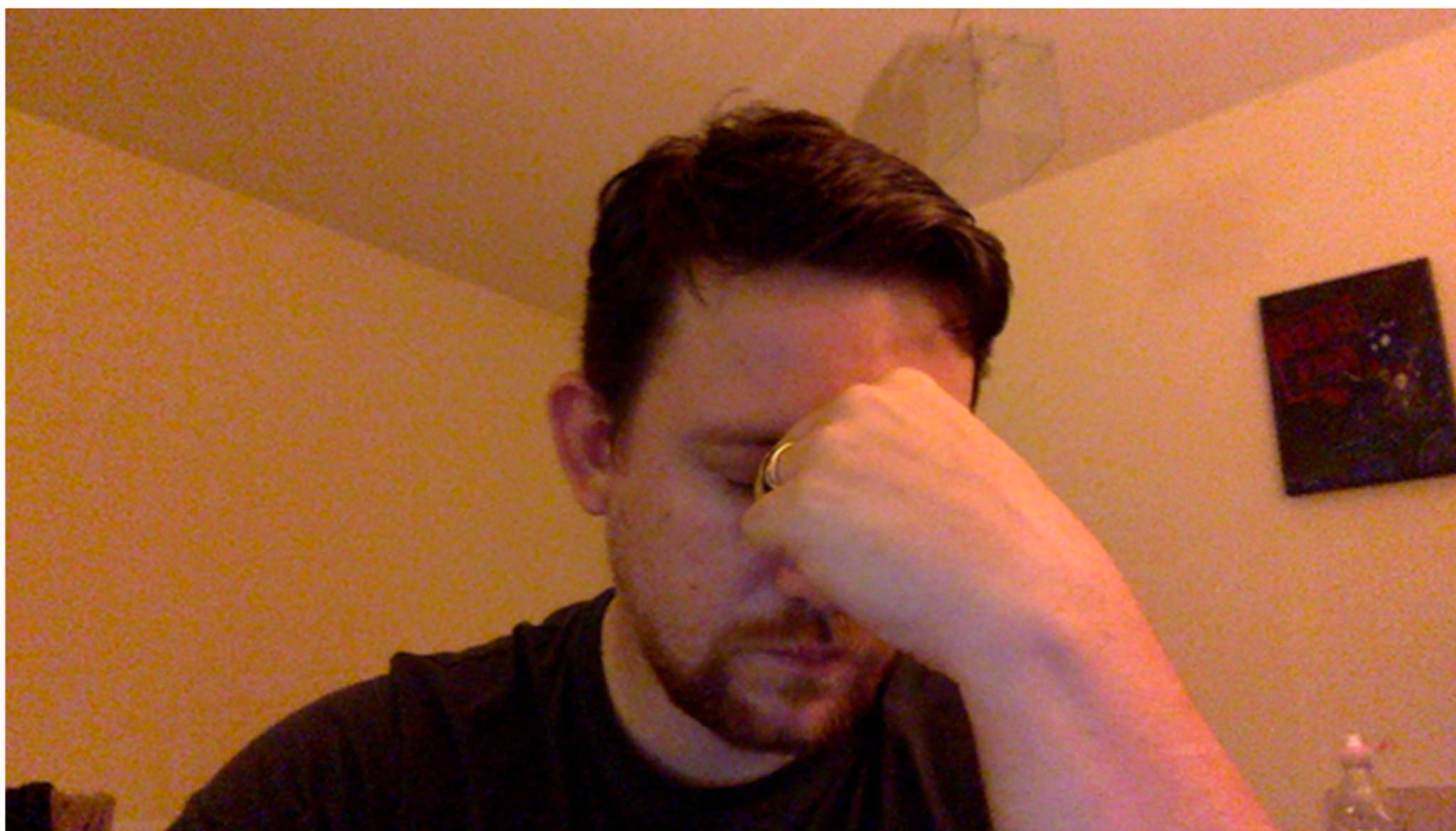




**Aaron Bassett**

@aaronbassett

✓ 319 passed - ✗ 1 failed.



1:20 AM - 17 Jun 2015



```
2 var exec = require('child_process').exec;
3 var sleep = require('sleep');
4 var Twitter = require('node-twitter');
5
6 var mocha = new Mocha({});
7 var twitterRestClient = new Twitter.RestClient(
8   'CONSUMER_KEY',
9   'CONSUMER_SECRET',
10  'TOKEN',
11  'TOKEN_SECRET'
12 );
13
14 mocha.addFile('/Users/aaronbassett/twitter/tests.js')
15
16 var failCount = 0;
17 var passCount = 0;
18
19 mocha.run()
20   .on('pass', function(test) {
21     passCount++;
22   })
23   .on('fail', function(test, err) {
24     failCount++;
25   })
26   .on('end', function() {
27     if(failCount > 0) {
28       exec("imagesnap /Users/aaronbassett/FAIL.png");
29       sleep.sleep(2);
30       twitterRestClient.statusesUpdateWithMedia({
31         'status': 'â€šÛÓ ' + passCount + ' passed - â€šÛÃ³ ' + failCount
+ ' failed.',
32         'media[]': '/Users/aaronbassett/FAIL.png'
33       });
34     }
35   });
```

```
1 var twitterRestClient = new Twitter.RestClient(  
2     ...  
3 );  
4  
5 var mocha = new Mocha({});  
6  
7 mocha.addFile(...)  
8  
9 mocha.run()  
10     .on('pass', function(test) {})  
11     .on('fail', function(test, err) {})  
12     .on('end', function() {  
13         if(failCount > 0) {  
14             ...  
15         }  
16     });
```

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13         if(failCount > 0) {  
14             ...  
15         }  
16     });
```

```
1 var twilio = require('twilio');
2
3 var client = new twilio.RestClient(
4     'TWILIO_ACCOUNT_SID',
5     'TWILIO_AUTH_TOKEN'
6 );
7
8 client.sms.messages.create({
9     to: 'MUM',
10    from: 'AARON',
11    body: 'I have failed you as a son.'
12 });
```



```
1 if (date.getHours() > 17) {
2     client.sms.messages.create({
3         to: 'WIFE',
4         from: 'AARON',
5         body: 'Sorry, I\'m going to be a bit late home tonight'
6     });
7 }
```

```
1 var twitterRestClient = new Twitter.RestClient(  
2     ...  
3 );  
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11     .on('fail', function(test, err) {})
12     .on('end', function() {
13         if (failCount > 0) {
14             ...
15         }
16     });
```







```
1 mocha.run()
2   .on('fail', function(test, err) {
3     failCount++;
4   })
5   .on('end', function() {
6     if(failCount === 0) {
7       exec("afplay applause.mp3");
8     }
9   });
```

```
1 mocha.run()
2   .on('fail', function(test, err) {
3     failCount++;
4   })
5   .on('end', function() {
6     if(failCount === 0) {
7       exec("afplay applause.mp3");
8     }
9   });
```



```
e740f03 Reverting X's changes and removing their push rights [✓ 372 passing - x 0 failing]
0381107 No notable changes. [✓ 12 passing - x 360 failing]
9ccd9cc Revert changes subscription page [✓ 372 passing - x 0 failing]
83dcfef Add feature flags! Yay A/B Testing [✓ 372 passing - x 0 failing]
384a46b Update subscription page with new layout [✓ 340 passing - x 0 failing]
7cb50ff Fix failing registration tests [✓ 340 passing - x 0 failing]
07c617e Update required fields for new registrations [✓ 338 passing - x 2 failing]
6d16f67 Add email validation for all accounts [✓ 332 passing - x 0 failing]
dad5fa Fix error with account creation [✓ 326 passing - x 0 failing]
```

```
~
~
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~
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~
```

(END)

```
ssh -t raspberrypi 'echo O M G $NAME! You  
broke your tests again? | festival --tts'
```

Browser window: New Tab | Aaron

Address bar: |

Bookmarks: Apps, Travis, ★, utils, TL;DR, T, 2048, 2048, COREFX: Bank as a f, Workouts, » Other Bookmarks

Team Member	Tests ran	Failed	Passed	Frequency	Points
Anne	10,439	654	9785	3.6	35226
Steven	9,719	2,198	7,521	2.4	18050.4
Sara	7,976	13	7963	2.1	16722.3
Peter	6,793	356	6437	1.5	9655.5
Jo	3,615	402	3213	2.4	7711.2
Jane	2,923	476	2447	2.6	6362.2
Simon	1,423	187	1236	0.5	618
Jack	543	165	378	0.3	113.4
Mike	847	302	545	0.1	54.5












# BitcoinJS

The clean, readable, proven library for Bitcoin JavaScript development.

build failing coverage 99%

 npm install bitcoinjs-lib  
7 dependencies version 1.5.7  
40 dependents updated a month ago

Fork me on GitHub

A pure JavaScript Bitcoin library for node.js and browsers. **Used in production**





**BORING**

SOONER OR LATER,  
ALL OUR GAMES TURN  
INTO CALVINBALL .

NO CHEATING !







@aaronbassett