

TESTING: A TOOL FOR HUMANS

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WHY AM I HERE?

TL;DR

TESTS ARE A TOOL THAT ARE MEANT
FOR YOU AS A MEANS TO SAVE YOU
TIME AND MAKE YOU LESS STRESSED.
THAT'S IT.

WHY BOTHER
WRITING TESTS
AT ALL?

TESTS MAKE CHANGING
YOUR CODE NOT
TERRIFYING



TESTS MAKE YOU WRITE
BETTER CODE

Carrier

12:37 PM



Stripe Shop ▾



TODAY'S REVENUE

\$ 0 00

2W 1M 3M 1Y ALL

\$1,307.00



Activity ▾

- 📝 Invoice changed cus_2WeOHO4bUP8ewj 12h >
- ❗ \$20.00 invoice failed cus_2WeOHO4bUP8ewj 12h >
- ❗ A \$20.00 charge failed bob@doe.com 12h >
- ✓ \$10.00 charged Visa 0259 1d >
- 📝 Invoice changed cus_2WeOHO4bUP8ewj 2d >

**MASSIVE VIEW
CONTROLLERS**

Stuff



Fish legs

A used lobster

Onions

Cats

Splinters

Pineapples

NSURLSessionDataDelegate

FETCHES THINGS FROM THE NETWORK

```
func URLSession(session: NSURLSession,  
dataTask: NSURLSessionDataTask,  
didReceiveResponse response: NSURLResponse,  
completionHandler: (NSURLSessionResponseDisposition) -> Void)
```

UITABLEVIEWDATASOURCE

POPULATES A UITABLEVIEW

```
func tableView(tableView: UITableView,  
cellForRowAtIndexPath) -> UITableViewCell
```

A BETTER WAY

```
class APIClient: NSURLSessionDataDelegate {
    func fetchURL(url: NSURL,
success: (NSHTTPURLResponse -> Void),
failure: (NSError -> Void))
}

class APIDeserializer {
    func parseURLResponse(response: NSHTTPURLResponse)
-> [Row]
}

class NetworkedTableViewDataSource: UITableViewDataSource {
    func init(tableView: UITableView,
              apiClient: APIClient,
              deserializer: APIDeserializer)
}

class StuffViewController {
    init(dataSource: NetworkedTableViewDataSource)
}
```

ADDING TESTS TO AN UNTESTED PROJECT: THE ALGORITHM

1. WRITE A TEST. LITERALLY. ANY TEST.
2. WRITE MORE TESTS.



coveragebot commented 4 days ago



Current coverage is 30.10%

Merging [#276](#) into **master** will increase coverage by +0.06% as of [31c42be](#)

@@	master	#276	diff	@@
=====				
Files	233	233		
Stmts	14057	14065	+8	
Branches	0	0		
Methods				
=====				
+ Hit	4224	4234	+10	
Partial	0	0		
+ Missed	9833	9831	-2	

Review entire [Coverage Diff](#) as of [31c42be](#)

Powered by [Codecov](#). Updated on successful CI builds.

TEST-DRIVEN DEVELOPMENT (TDD)

GIVEN A PROBLEM.

1. WRITE A BUNCH OF FAILING TESTS THAT DESCRIBE YOUR INTENDED BEHAVIOR
2. WRITE CODE UNTIL ALL THE TESTS PASS
3. REFACTOR UNTIL THE CODE IS GOOD

JOB INTERVIEWS

TEST-DRIVEN-DEVELOPMENT IS A REALLY NICE WAY TO DO JOB
INTERVIEWS, BUT ALMOST NOONE DOES IT

- SPECIFICATIONS GIVE YOU TIME TO THINK
- TESTS GIVE YOU CONFIDENCE
- TESTS IMMEDIATELY HIGHLIGHT ISSUES IN YOUR CODE

NOTHING TOO HEAVYWEIGHT

```
# interview.rb

class MyInterviewClass
  def time_left_in_talk(time)
    return "This talk is over in #{time} minute"
  end
end

raise "This is wrong" unless time_left_in_talk(1) == "This talk is over in 1 minute"

# to run this, just `ruby interview.rb`
```

MORE READING

- › [HTTP://KHANLOU.COM/2015/12/MASSIVE-VIEW-CONTROLLER/](http://KHANLOU.COM/2015/12/MASSIVE-VIEW-CONTROLLER/)
- › <HTTPS://REALM.IO/NEWS/ANDY-MATUSCHAK-REFACTOR-MEGA-CONTROLLER/>

THANK YOU
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