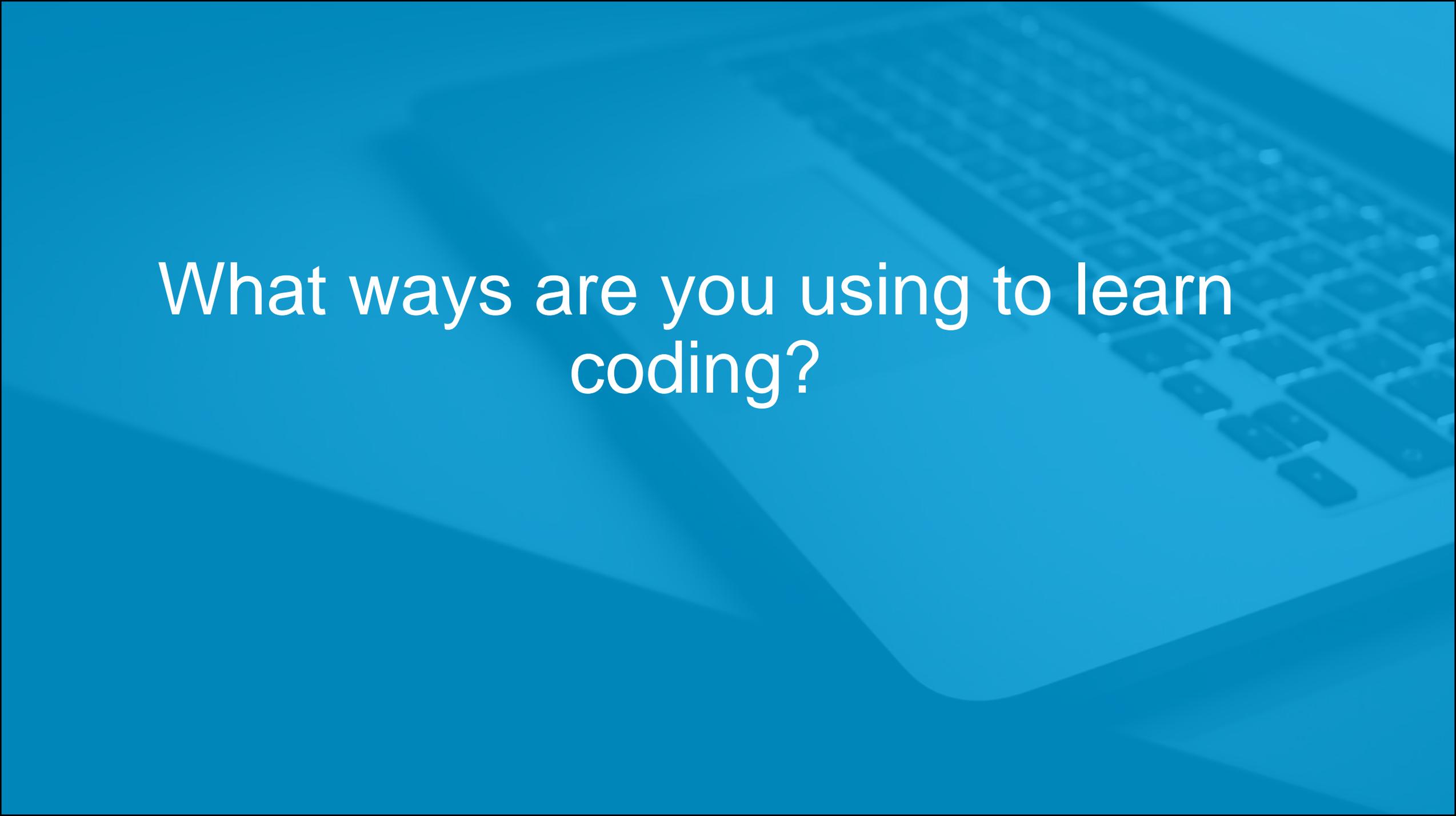


Improving Quality Team Coding Skills with Code Clubs

Dwayne & Kevin. Testers at CrowdCompass by Cvent.

Technical Paper: <http://www.pnsgc.org/code-clubs-as-training-for-app-debugging-and-programming-tasks/>



What ways are you using to learn coding?

Who else is doing it?



A journalist @ NPR, interviewing some bad-ass people

Editing some bad-ass interviews

https://www.youtube.com/watch?v=mW_xKGUkLpk

About us



Recipe

why we did it

how you can do it

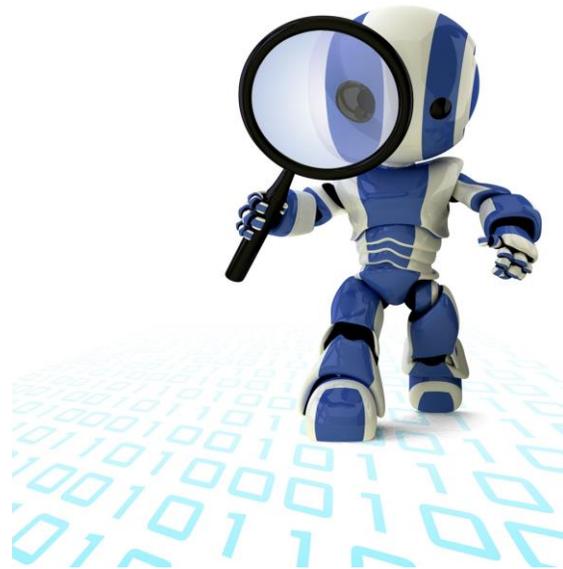
what we got out of it

what the company got out of it

next steps

Kevin's reason

- Write more automation.



Dwayne's reason

- Engaged with development discussions
- Resilient skills: learning to read and write code.



Company's reason



- Better tests against application
- Better code in automated tests

Recipe

why we did it

how you can do it

what we covered

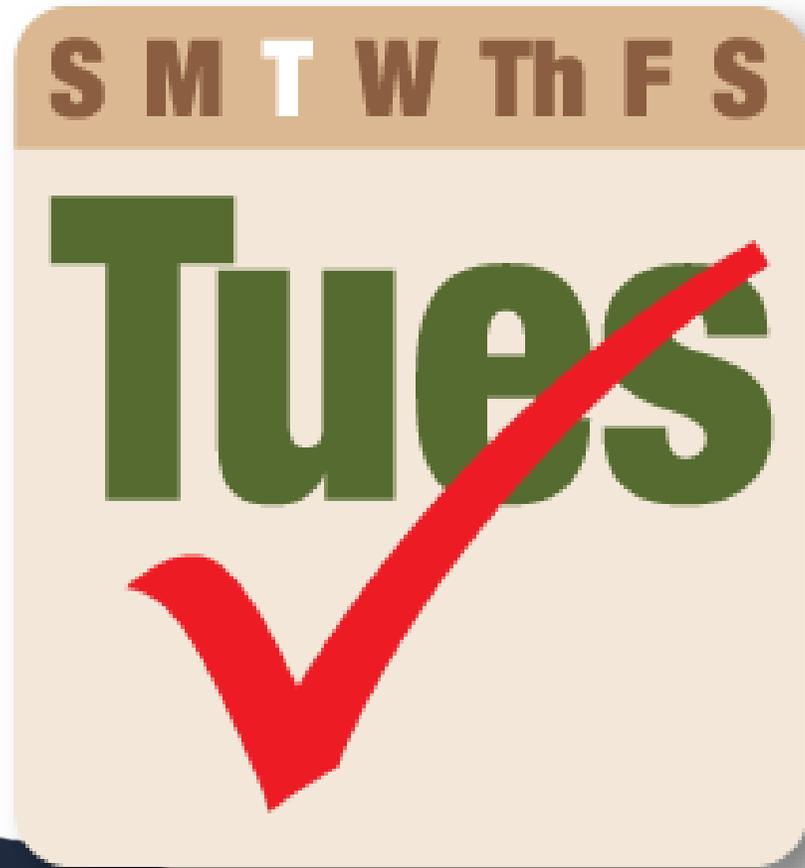
what the company got out of it

next steps

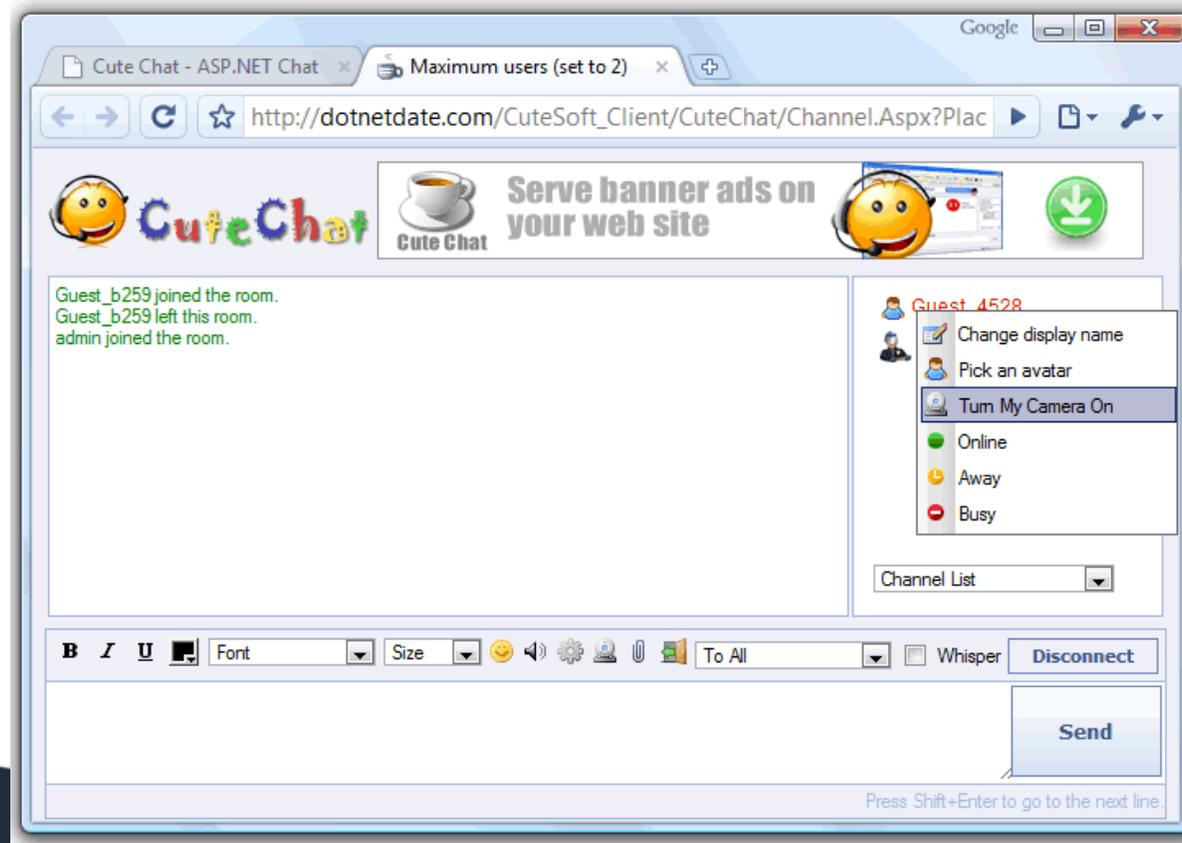
So I started a Code Club*.



Keep meetings regularly



Document conversations casually





100 Lines of Code

```
91     for code in codeclub_ids:
92         if i % 100 == 0:
93             print i
94             i += 1
95         codeclub_dict = {}
96         r = requests.get("%s&jvid=%s" % (b
97         soup = BeautifulSoup(r.text)
98         codeclub_dict["employer_name"] = s
99         codeclub_dict["position_title"] =
100        codeclub_dict["position_location"]
```

The developers helped, too



Grassroots efforts



Recipe

what we did it

how you can do it

what we got out of it

what the company got out of it

next steps



Fun Stuff

Webscrapers:

- * [Second Chance](#) - government jobs
- * [Amazon Scraper](#) - Now a python package
- * [Craigslist Scraper](#) - apartment keywords

Timesavers:

- * [Dirmon](#) - folder monitor utility

Games:

- * **Several under discussion**

Company Application

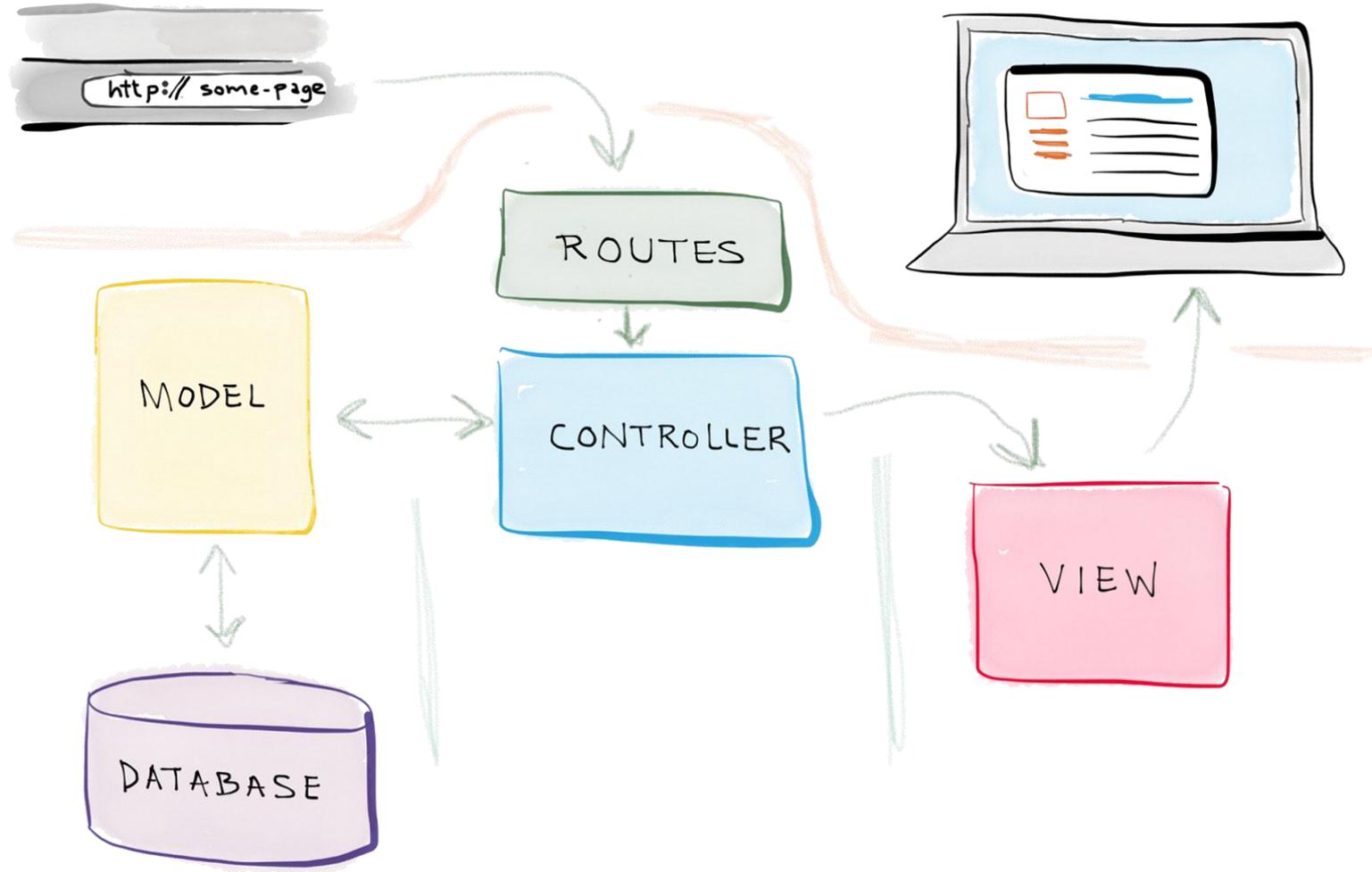
- * Rails file structure
- * Routes.rb
- * Rspec
- * Swift unit tests
- * Login (future):
- * Javascript and front-end apps



How many of you could describe
the infrastructure of your
application?

Best Practices: Design Patterns

Model View Controller Pattern



Snippets: Tasty little morsels of code



Stack Overflow on location of list values



18



The only 'trick' I know that really wowed me when I learned it is enumerate. It allows you to have access to the indexes of the elements within a for loop.

```
>>> l = ['a','b','c','d','e','f']
>>> for (index,value) in enumerate(l):
...     print index, value
...
0 a
1 b
2 c
3 d
4 e
5 f
```

[share](#) [improve this answer](#)

answered Mar 28 '09 at 2:16



[theycallmemory](#)

5,053 ● 4 ● 34 ● 63

-
- 1 Its quite amusing when Java/C programmers always have the indexes with for(n=0;n<l.length;n++) – [Unknown](#) Mar 29 '09 at 6:00
-
- 16 No need to put index, value in parentheses. Also, the above comment is naive/ignorant. – [FogleBird](#) Jul 12 '09 at 13:50
-
- i love enumerate – [AnojiRox](#) Aug 16 '12 at 16:38
-

Webscraping

Get all links from a web page:

```
import httpplib2

from BeautifulSoup import BeautifulSoup,
SoupStrainer
http = httpplib2.Http()

status, response = http.request('http://www.nytimes.com')

for link in BeautifulSoup(response,
parseOnlyThese=SoupStrainer('a')):

    if link.has_attr('href'): print link['href']
```

Command Line Interface Creation Kit

```
$ click_ 
```

CLICK

```
$ python hello.py --help
```

```
Usage: hello.py [OPTIONS]
```

```
Simple program that greets NAME for a total of COUNT times.
```

```
Options:
```

```
--count INTEGER  Number of greetings.
```

```
--name TEXT      The person to greet.
```

```
--help          Show this message and exit.
```

Recipe

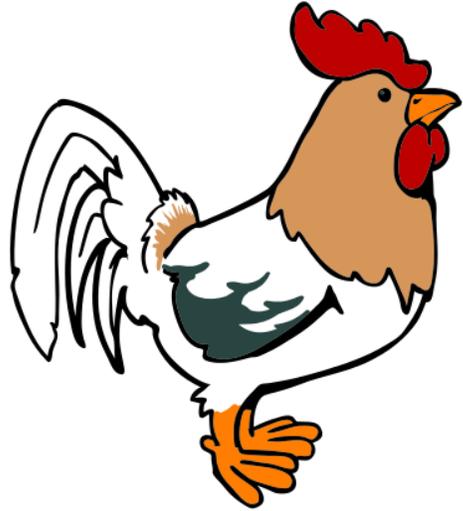
what we did it

how you can do it

what we got out of it

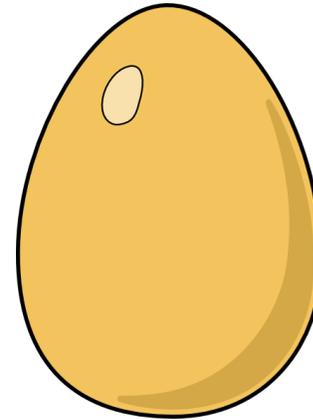
what the company got out of it

next steps



Good for the company

Good for the participants



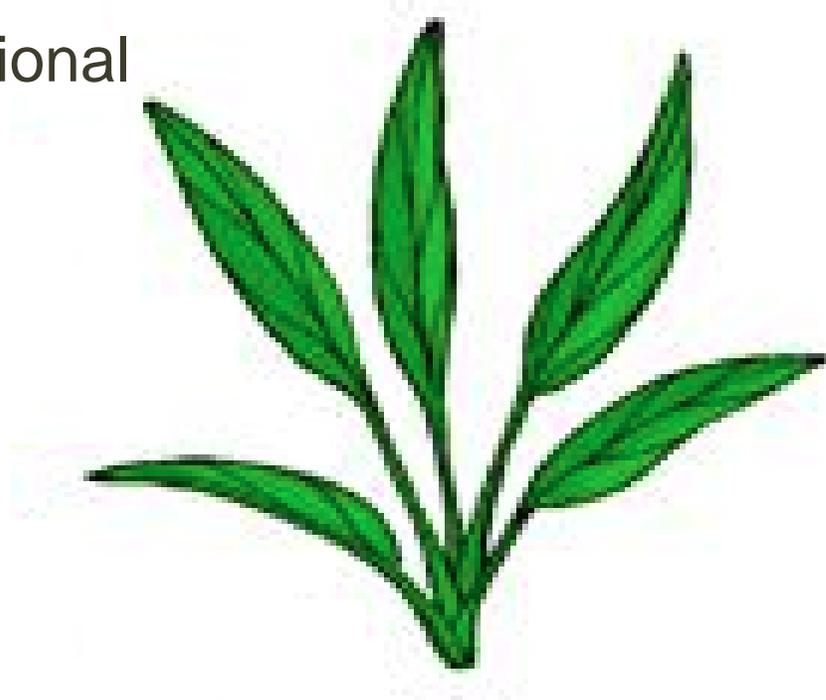
Benefits brought to you in part by code club

More automated tests

More coding testers

More crossfunctional interaction

More utility scripts



More lunchtime learning activities

Better Tests

Everybody's Writing Code



Recipe

what we did it

how you can do it

what we got out of it

what the company got out of it

next steps

Mostly we plan to keep on



Code bases keep growing

Github

Automated Tests

CrowdCompass Apps

Handy Scripts

API Clients

We have unlimited resources

We're open to new ideas



Summary

Dwayne has learned a lot about programming.

Kevin continues to get better at writing automated tests.

The CrowdCompass automated test suite continues to grow.