INTERNET OF CATS
OR
TRYING NEW THINGS IS SCARY
by Rachel White / @ohhoe
TRYING NEW THINGS IS SCARY

Embarking on a new project
Using new technologies for the first time
Contributing to Open Source
Putting yourself out there ~ in general ~
WHY IS IT SO SCARY?

Fear of rejection

Imposter Syndrome

Inclusiveness of Communities

Bad Behavior in General

People getting mad about CoC's existing
BAD BEHAVIOR?

Feigned Ignorance ex: "Oh, you didn't know about THIS method"

Completely ignoring contributions

Alternately for maintainers, demanding userbase

Useless PR's for the sake of a green timeline

Insulting the contributor

Disagreeing over trivial things
OPEN SOURCE EXPERIENCES
I polled on twitter to get personal experiences about bad experiences that people have encountered with open source.
@jennmoneydollars @jennschiffer · 35m
@ohhoe vulgar and brutal harassment, expectation and entitlement of your time without any compensation offered
unfortunately the harassment was enough for me to stop trying before I had other problems, so that's where I'm at
ANONYMOUS

“entitlement of time, the assumption you immediately want feedback when you’re just starting, nerd pedantics obstructing learning”
@CAROLINESINDERS

feminist female @carolinesinders · 33m
@jennschiffer @ohhoe mansplaining mainly and a general fear that any commit I make will be opened as an issue, and debated about. #realfear
Maciej Jasiobedzki @wchwd · 22m
@ohhoe sent a pull request with bug fixes that got ignored for almost a year, after which the maintainer wrote the same fixes & said "oops".
@ohhoe mansplaining my own code to me, trolling
**Echochamber.js**

**All of the commenting, none of the comments.**

*alpha af*

Echochamber.js is a third-party script you can install to add a simple comment form to your blog post or website.

*why not just use disqus?*

Because then there’d be a chance that someone would read the comments. You might have to read those comments. You don’t want that.

When a user submits a comment, echochamber.js will save the comment to the user's LocalStorage, so when they return to the page, they can be confident that their voice is being heard, and feel *engaged* with your very engaging content. It does not make any HTTP requests. Since LocalStorage is only local, you and your database need not be burdened with other people’s opinions.
Web development or web design does have a psychological part besides the technical part, and this library is intended to give the illusion to the user that he engages with the website by commenting it.

It clearly has the intent to dupe or trick the end-user, as no indication is given that his/her message will not be sent through the network.

In the ReadMe, the library is even described as an alternative to Disqus. But apart from toying, developing or prototyping, is there a real value of using it on a public-facing website?

Such library seems to rise ethical concerns about the relationship between the maintainer of the website and the end-user. It is promoting relationships based on duping another, that is, a form of irresponsibility and indifference... Is it any good? Just asking to myself.

It is not because it is internet that human interactions should be this way. Or if it is a general way of thinking about human interactions, isn't it a bit absurd? Once again, just asking to myself, and thinking aloud.
MY PROPOSAL FOR NEW CONTRIBUTORS

Find something you're passionate about

Or something new you want to try

Make something cool and open source it yourself

First point of contact is your peers

Constructive criticism from your peers is a billion times more helpful (and less stressful) than randos being jerks (obvs)
I LIKE CATS

I've been talking about building a cat feeder bot forever
I love my brief experiences with the nodebots community
I decided to build a node based cat feeder that works over the web
ROBOKITTY
A DIY AUTOMATED CAT FEEDER
TECH I PICKED

node.js
johnny-five
socket.io
Arduino Uno
Arduino Yun
Particle Photon
PARTLIST

Dry Goods Dispenser
Particle Photon Kit (with breadboard)
Continuous Servo
4xAA battery pack with on/off switch
Misc Hardware Accessories: MtM Jumper Wires, Soldering Iron, Heatshrink
THINGS WENT... FAIRLY SMOOTH

electricity scares me...

i didn't realize i needed external power to the servo

I have no idea how to solder (thanks youtube!)
TIME FOR TESTING!

the code is working great
cron job is working as intended
the servo is strong enough to turn the feeder handle
but...
it won't stop
I STARTED FREAKING OUT ON TWITTER
@rachel (=^-ω-^=) @ohhoe · Nov 2

WHY

```
1446518723972 Device(s) particle-io
events.js:85
    throw er; // Unhandled 'error' event
    ^
Error: Unable to connect to particle cloud.: code: 401 Unauthorized
    at IncomingMessage.emit (events.js:129:20)
    at _stream_readable.js:908:16
    at process._tickDomainCallback (node.js:381:11)
```

@rachel (=^-ω-^=)

@ohhoe THIS WORKED YESTERDAY WHY THE WONT IT NOW I DON TUNDERSTAND;FALKJWA
SO I LOOKED TO MY PEERS

Johnny-Five gettier chat
Brooklyn JS nodebots room
People reviewed my code, said nothing was wrong
so what's going on?
THEN SOMETHING AWESOME HAPPENED!

IT WAS A BUG IN JOHNNY-FIVE
THE CODE FOR MY AUTOMATED FEEDER IS DONE!!! If I didn't already have a cat named Rick, I'd name the next one after @rwaldron

@ohhoe I couldn't get my servo to work correctly with Johnny-Five and he went and bought the same one and found a bug in the J5 code! ❤️

Small correction: @ohhoe discovered the bug and deserves the credit for surfacing the issue.
```javascript
var http = require('http'),
    fs = require('fs'),
    index = fs.readFileSync(__dirname + '/index.html'),
    five = require('johnny-five'),
    Particle = require('particle-io'),
    CronJob = require('cron').CronJob;

// Set up the access credentials for Particle
var token = process.env.PARTICLE_KEY || 'REPLACE WITH YOUR PARTICLE KEY';
var deviceId = process.env.PHOTON_ID || 'REPLACE WITH YOUR PHOTON ID';

// Send index.html to all requests
var app = http.createServer(function(req, res) {
    res.writeHead(200, {'Content-Type': 'text/html'});
    res.end(index);
});
```
CLIENT CODE

```html
<script src="https://cdn.socket.io/socket.io-1.2.0.js"></script>
<link rel="stylesheet" href="https://storage.googleapis.com/code.getmdl.io/1.0.6/material.indigo-pink.min.css">
<script>
    var socket = io.connect('http://localhost');
</script>
<style>
    body {
        background-color: #74c7a4;
        margin: 0;
    }
</style>

<button name="on-button" class="turn-on mdl-button">Turn Motor On</button>

<!-- The second value will be selected initially -->
```
ROBOKITTY
A DIY AUTOMATED CAT FeEDER

FEED ME IMMEDIATELY
I'M ALMOST READY TO OPEN SOURCE!

I put a call out on twitter for code reviews

The response was overwhelming
SO MANY PEOPLE HELPED!
TIME FOR LAUNCH

They refactored it & added routing

Made it into a npm module

Reviewed the readme for language

They LIKED it
LAUNCH DAY!

I changed the repo to public

Tweeted about it

Submitted a link to hacker news

Took a nap

and then...
I built something similar for my girlfriend recently. When she's at work, she misses our dog so I built her a device that, when activated, dispenses a few treats, takes a video of Pickles enjoying the treats and sends it back to the sender. She can activate it by either sending an email or, better, picking up a picture frame that I customized. Inside the frame is a sensor that detects her touching the photo and that triggers the process, with the video ending up on her phone.

The main components are a Raspberry Pi to listen and control things plus an Amazon Dash button that I reconfigured as an on/off switch located next to my front door.

Overall, the software itself was relatively easy. The tricky part was building a machine that dispenses a few treats consistently, not 3 treats then 15 then 0.

I've been thinking of writing this up in more detail. If there is interest, that may provide the motivation.

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I definitely hope to incorporate a camera as one of the future releases. :) I want to be able to spy on my kitties while I'm away.

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I tried an Arduino based one and the Raspberry PiCam. PiCam was far better quality. The challenge is getting it to stream real time which typically requires a hardcoded IP address. Easy if you have a router, hard if you live in an apartment complex.

The s/w for both can be largely cut/paste from the templates.

Of course you could also just buy a dropcam or similar device, which streams video to a site and then the mobile app watchest that stream, with a ~3 second delay. But that's not really fun.
My project Robokitty is live! 😄

🌟 An open source automated cat feeder powered by node. 🌟

github.com/rachelnicole/r...
2015年12月02日 21時00分00秒

ネコにエサを自動であげる機械をオープンソースで自作できる「robokitty」

自動でネコにエサを供給する機器はいくつか市販されていますが、誰でも簡単に使える自動エサやりマシン「robokitty」のプロジェクトがオープンソースで公開されており、愛猫・愛犬のため自作できるようになってます。

robokitty
http://imcool.online/robokitty/
WHAT I LEARNED

Don't be afraid of the unfamiliar
Don't be afraid to ask for help
People really like cat stuff
Don't downplay your abilities
I like nodebots a lot
THANK YOU.

@ohhoe

http://github.com/rachelnicole/robokitty

http://rachelisaweso.me

http://imcool.online