

Married
to the Mob
(programming)

hey hi hello

derek graham

@deejaygraham



sage



The characters and events
depicted in this
presentation are fictitious.
Any similarity to actual
persons, living or dead, is
purely coincidental

Mob?



```
struct group_info init_groups = { .usage = ATOMIC_INIT(2) };

struct group_info *groups_alloc(int gidsetsize){

    struct group_info *group_info;
    int nblocks;
    int i;

    nblocks = (gidsetsize + NGROUPS_PER_BLOCK - 1) / NGROUPS_PER_BLOCK;
    /* Make sure we always allocate at least one indirect block pointer */
    nblocks = nblocks ? : 1;
    group_info = kmalloc(sizeof(*group_info) + nblocks*sizeof(gid_t *), GFP_USER);
    if (!group_info)
        return NULL;

    group_info->ngrroups = gidsetsize;
    group_info->nblocks = nblocks;
    atomic_set(&group_info->usage, 1);

    if (gidsetsize <= NGROUPS_SMALL)
        group_info->blocks[0] = group_info->small_block;
    else {
        for (i = 0; i < nblocks; i++) {
            gid_t *b;
            b = (void *)__get_free_page(GFP_USER);
            if (!b)
                goto out_undo_partial_alloc;
            group_info->blocks[i] = b;
        }
    }
    return group_info;
}

out_undo_partial_alloc:
while (--i >= 0) {
    free_page((unsigned
```

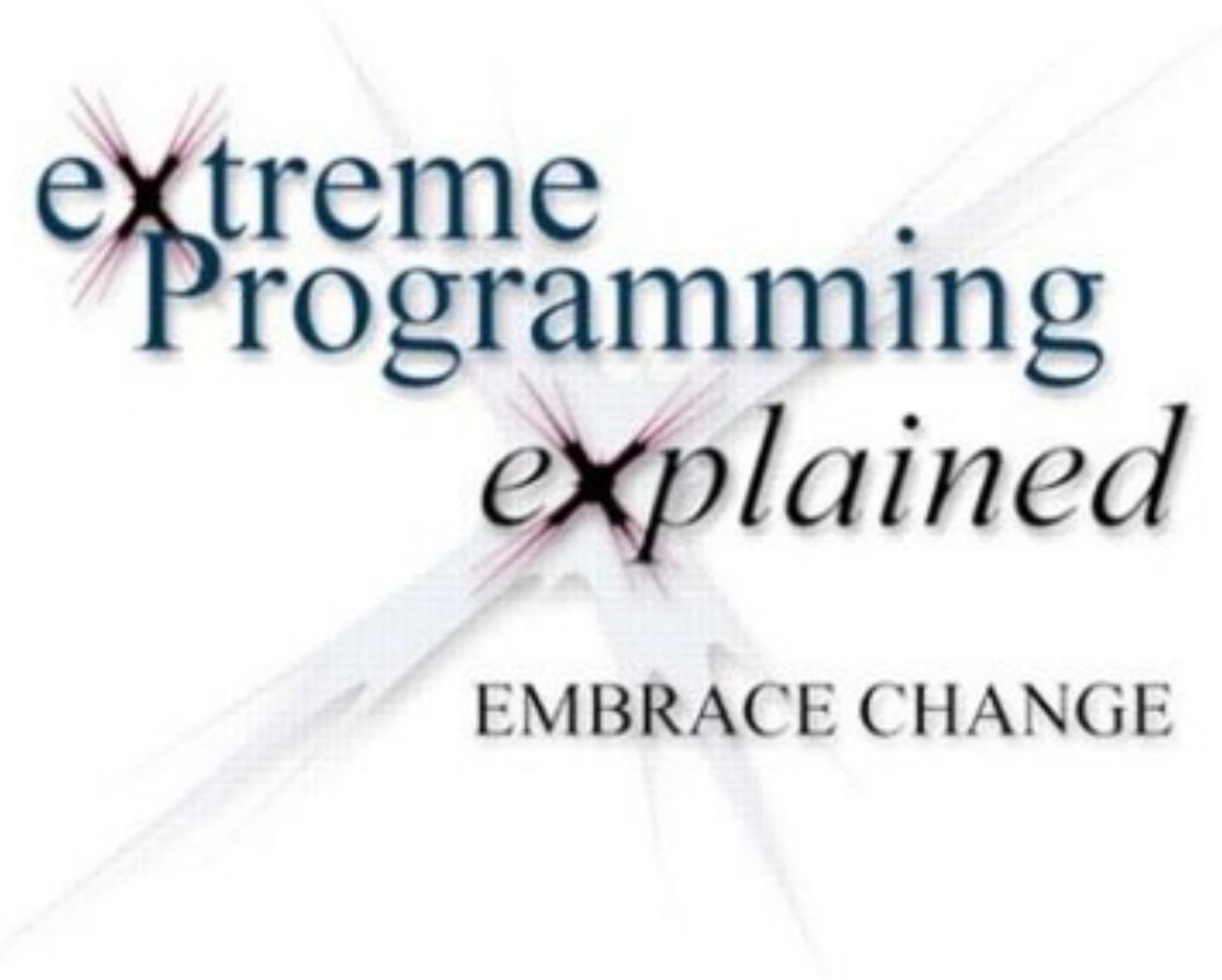


```
free_page((unsigned
```

90% done

PROCESS



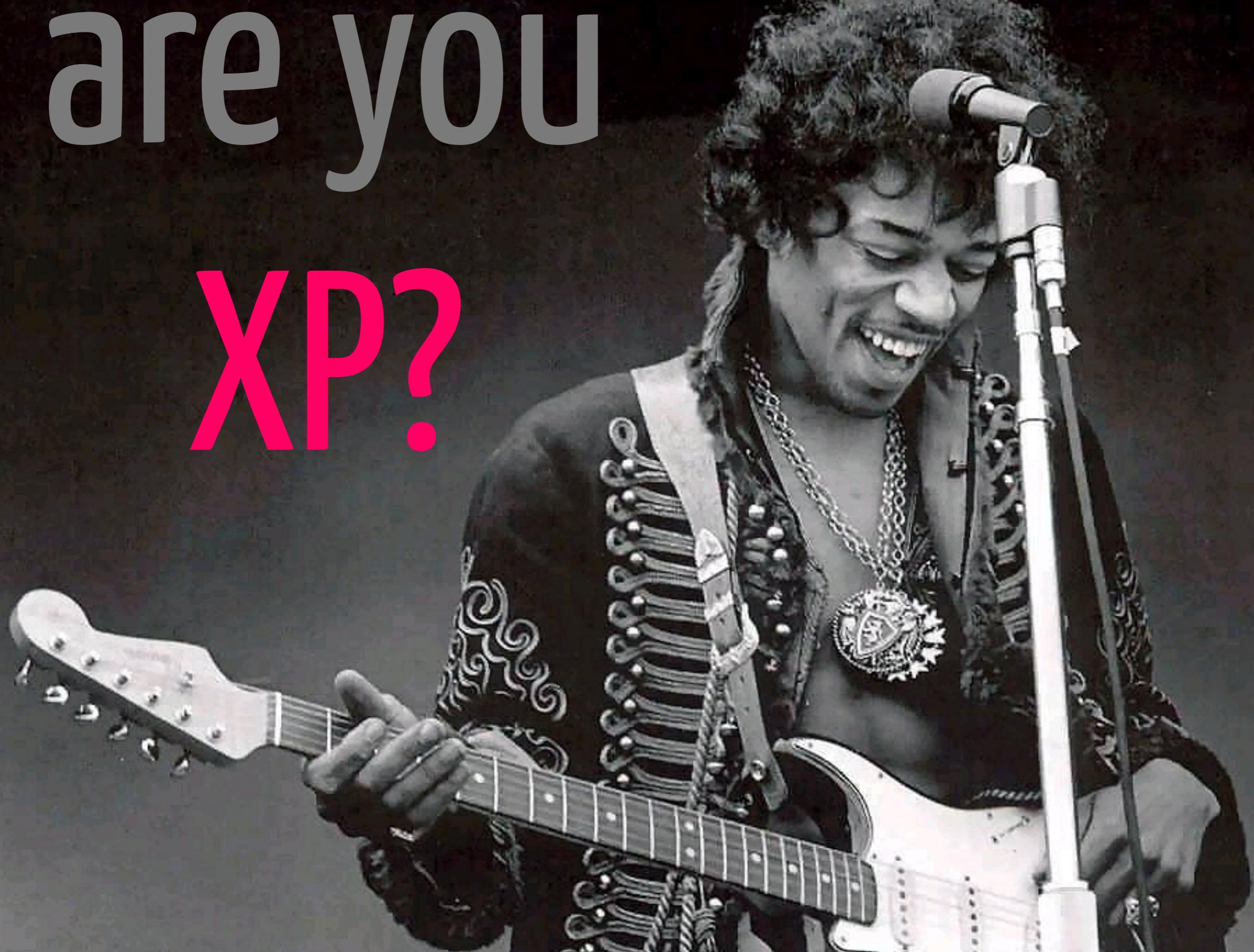


extreme Programming *explained*

EMBRACE CHANGE

Kent Beck

are you
XP?



XP Engineering Practices

- Continuous Integration
- Pair Programming
- Test Driven Development
- Simple Design
- Refactoring
- Collective Code Ownership
- Sustainable Pace

Swarming







C#



Test Script



DB Admin



HTML



JSON



Deploy Script

“Swarming ... is the first time we've felt like a genuine team instead of individuals all working for the same manager.”

– Our Team

Begin {

Days Without a B-16 CULP Related Accident:
Last date of Retrospective: 03-16-2015

Monday Manager

Aaron 11

Gordon

Dexter

Terry

Chris 11

Capitalizable
Dex Hours Notes

7

Chris - 6
Aaron - 5

I Love My Team

HPP ≈ HPP Must Have

Re-evaluate High Priority



**“All the brilliant people,
working on the same thing,
at the same time,
in the same space,
and at the same computer.”**

-Woody Zuill

**coding &
design &
testing &
deployment**

Mob = XP++

“Mobbing would be
in the XP book
(if they'd thought of it)”

-Rachel Davies (Agile Coach)



!Mob

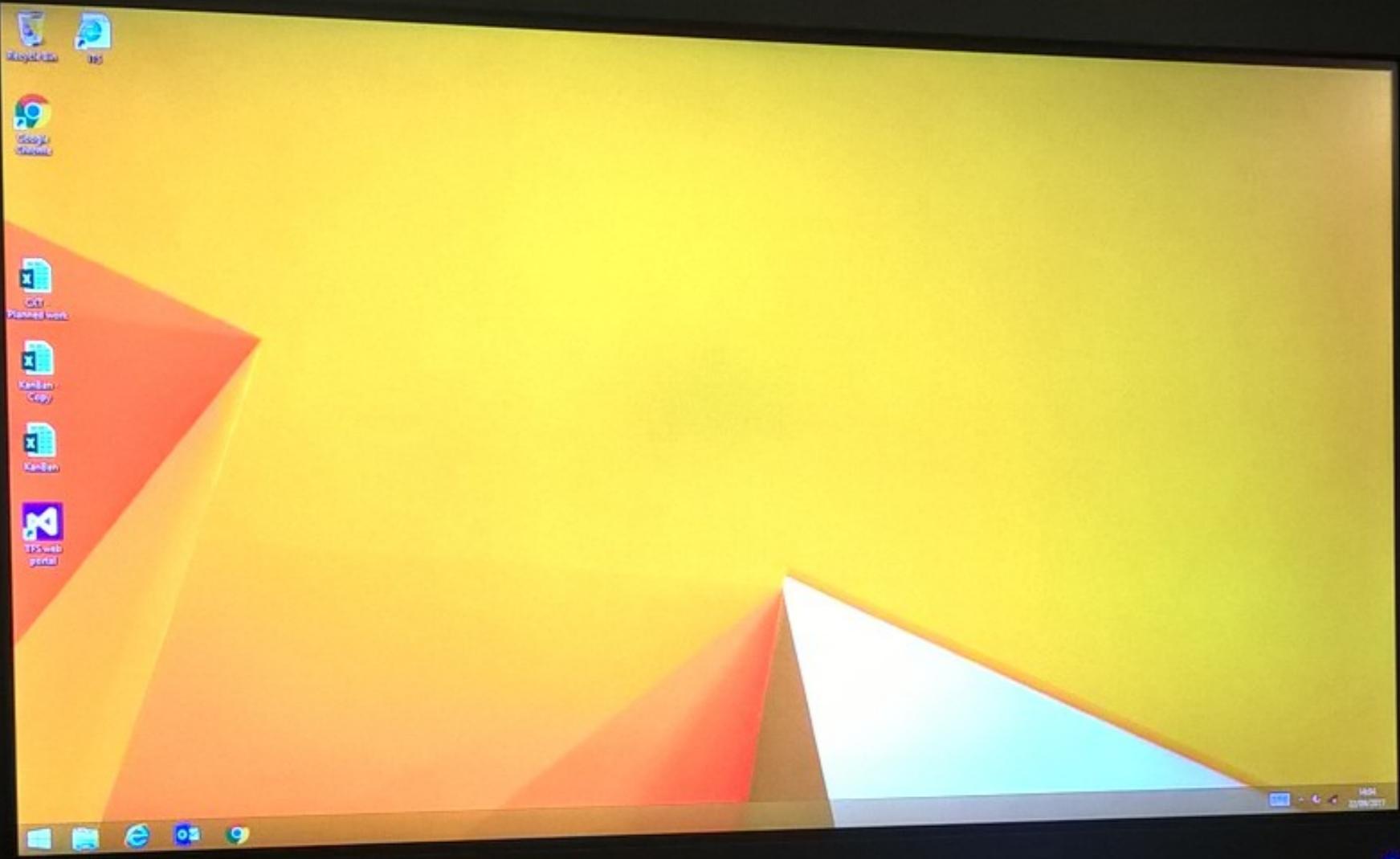
hello, Mob

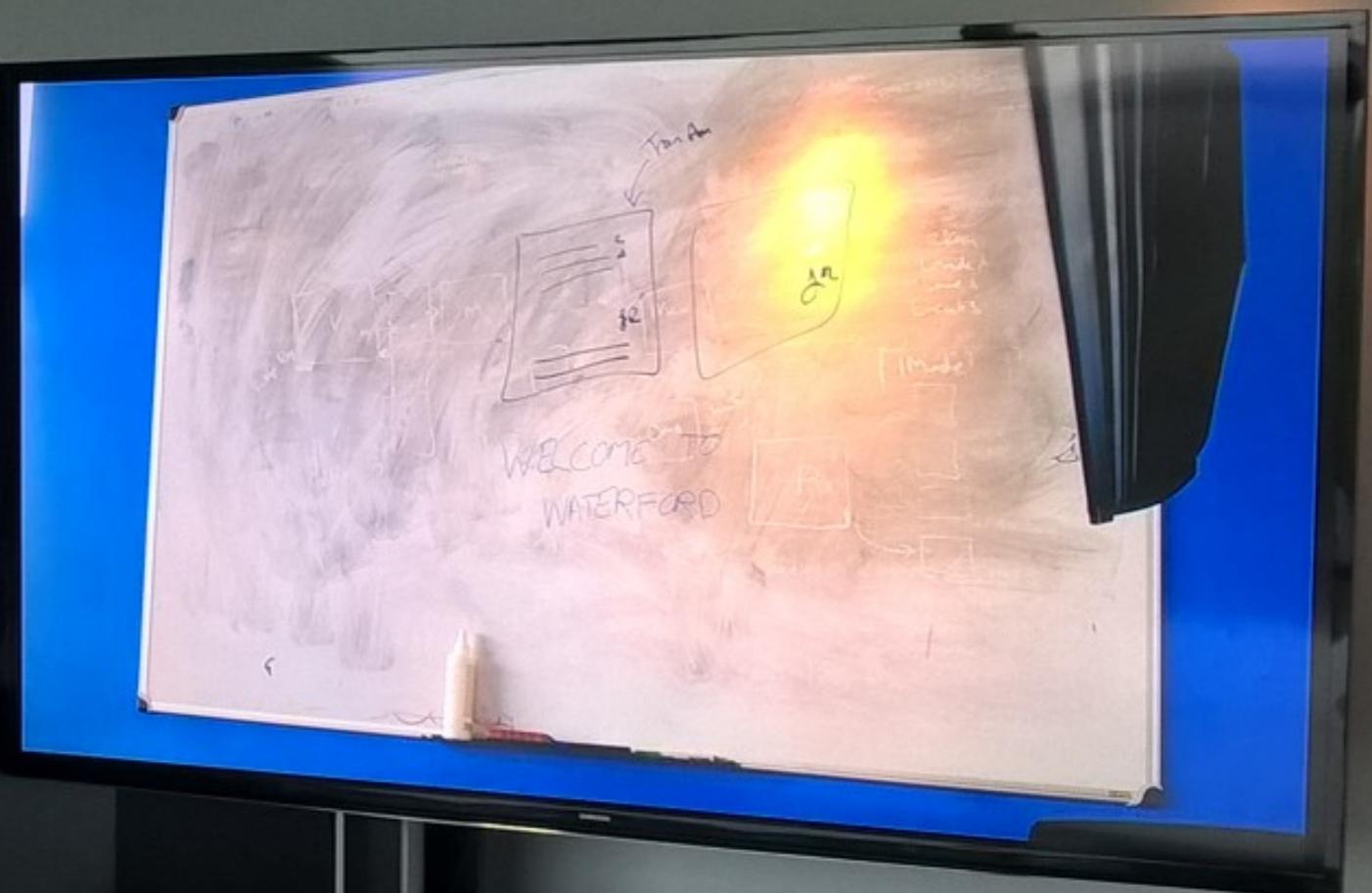
- One set of Input Devices
(keyboard and mouse)
- Everyone can see the code
- Everyone has a role
- Roles rotate over time

- Large Screen or HD Projector
- Keyboard & Mouse
- Timer
- Whiteboard
- A Problem



* reconstruction





Sage
Waterford
Sage Business Group
Paul Fox



#Waste

Mob Roles



Navigator

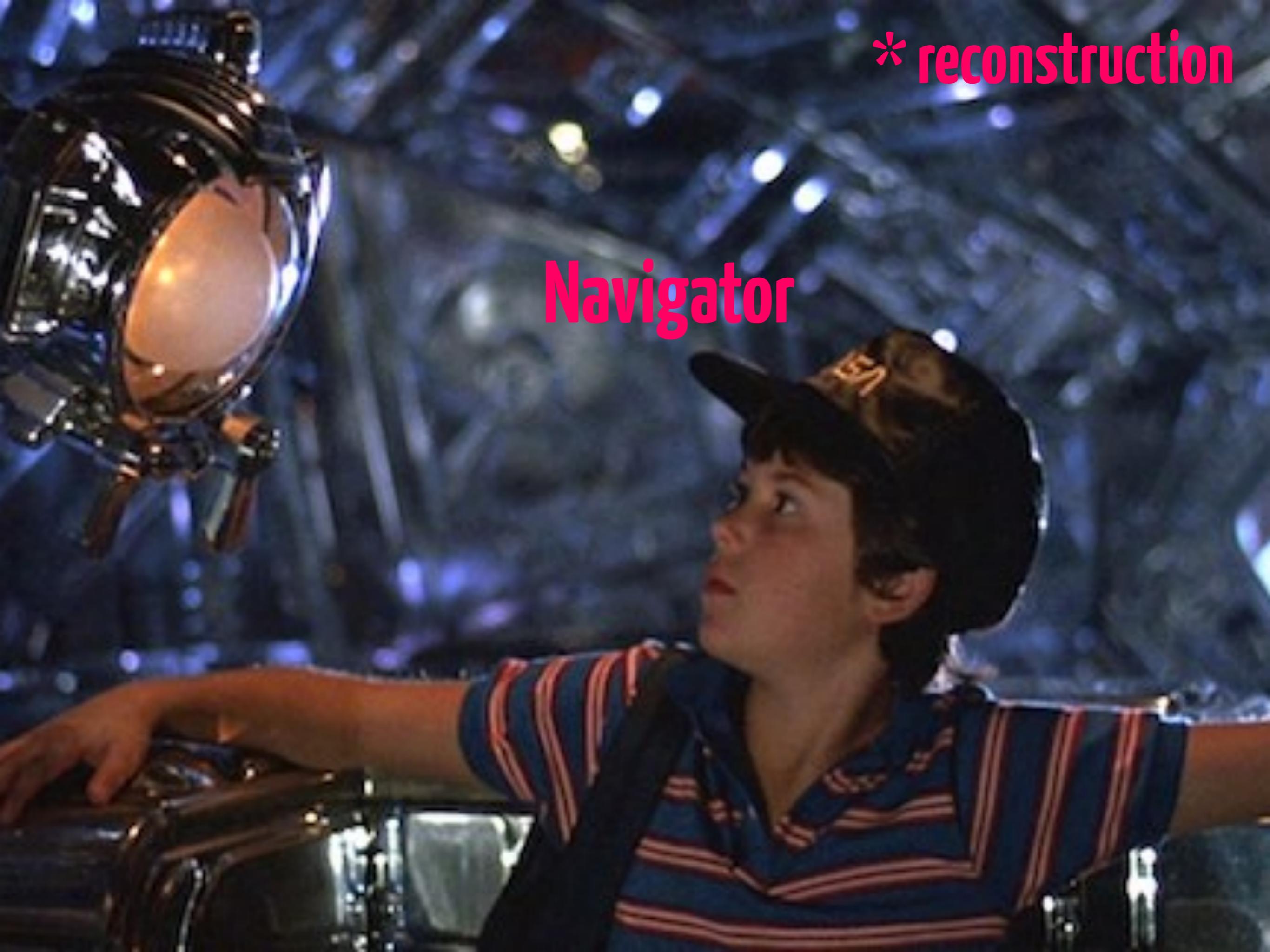
Driver



A man with glasses and a flight suit is smiling while holding a can of Red Bull. He is in a control room with multiple monitors displaying data. The word "Driver" is overlaid in pink text at the top right, and "*reconstruction" is overlaid in pink text at the bottom right.

Driver

*reconstruction

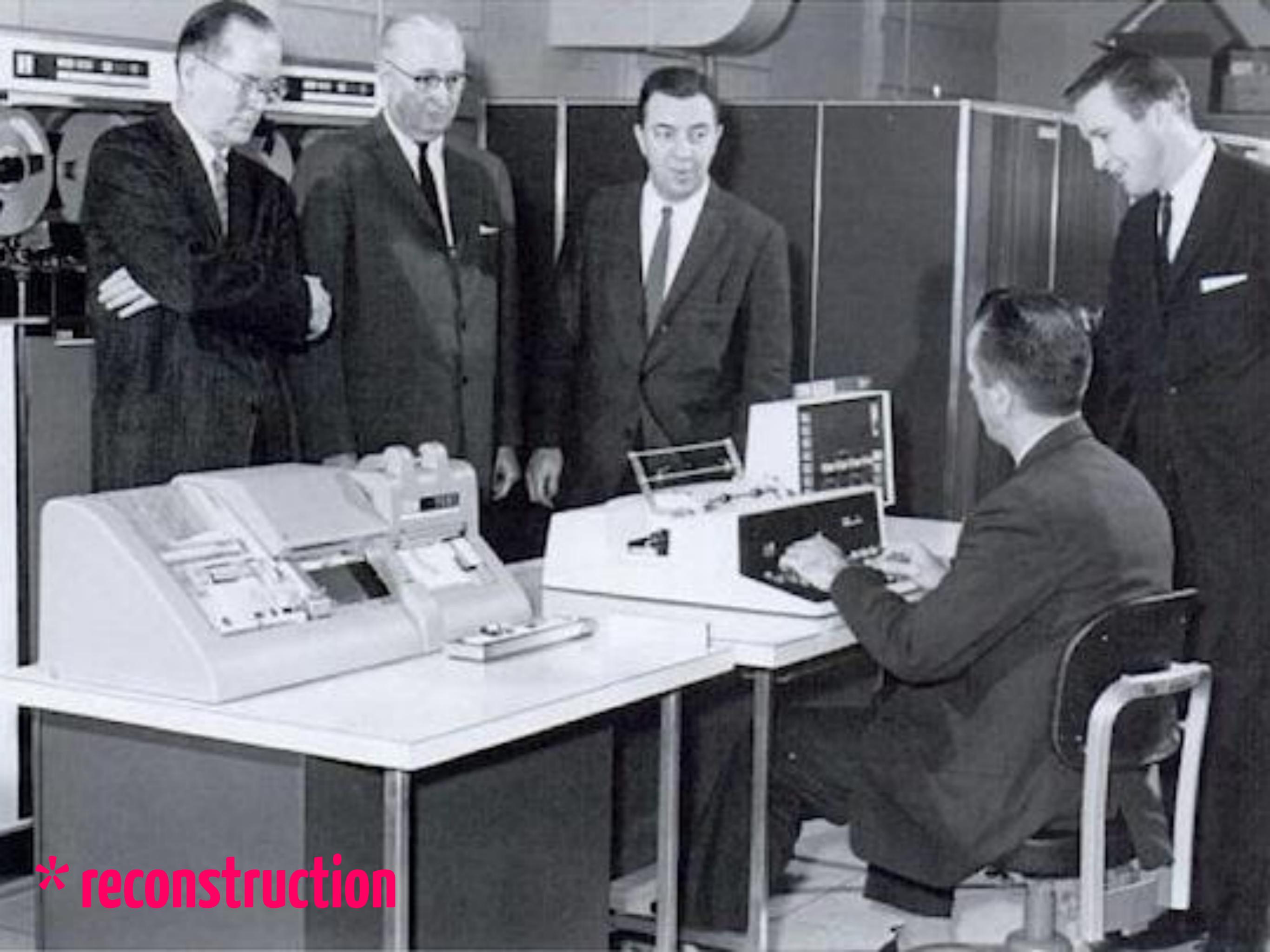
A photograph of a young boy with dark hair, wearing a dark flight suit with red stripes on the shoulders and a white name tag. He is looking upwards with a thoughtful expression. The background is a dark, star-filled night sky with some blurred lights from buildings or trees.

* reconstruction

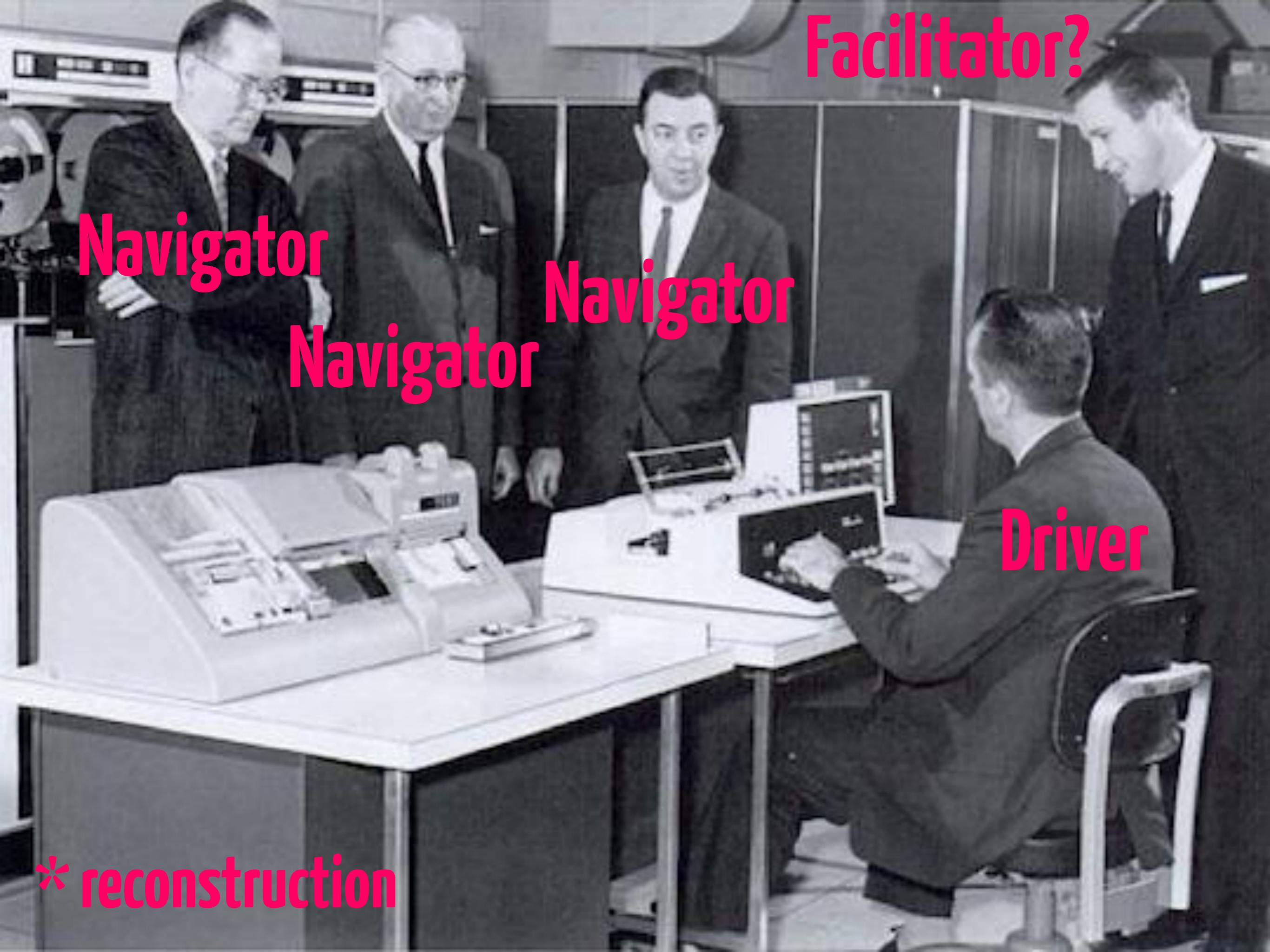
Navigator



*reconstruction



* reconstruction



Facilitator?

Navigator

Navigator

Navigator

Driver

* reconstruction

Mob Rules

- Kindness
- Consideration
- Respect
- “Yes and...” ideas
- Strong-style Pairing



**“We decided for one day to
pretend to be kind,
considerate and respectful.
And then we decided to do it
again.”**

- Woody Zuill

“Regardless of what we discover,
we understand and truly believe
that everyone did the best job
they could, given what they
knew at the time, their skills and
abilities, the resources available,
and the situation at hand.”

—Norm Kerth

Hunter Software Department Lofty Goals

How do we interact?

Kindness
Consideration
Respect

Be Vulnerable
Hold Trust
Show Appreciation

Psychological Safety

How do we code?

No one Between the
Code and Production

Clean Code

Zarroboogs

How do we do business?

Deliver Valuable
Working Software to
Customers Daily

Any One Can Take a
Vacation At Any
Time: Zero Silos

Effective
Interdepartmental
Communication

How do we innovate?

Continuously Develop
Lofty Goals &
Practices

Experiment
Frequently

Develop Software
Community

if you aren't learning or
contributing, find a
better use for your time.

Mob Roles, 2

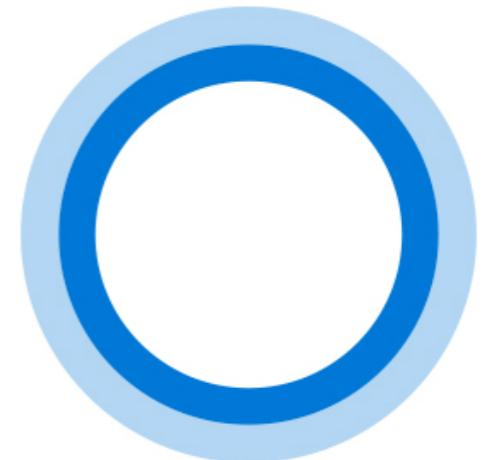
Driver

Driver Typist



Cortana for Code

1. Listen to the mob
2. Translate that into code
3. There is no 3



Siri for Syntax

- Write the Code
- Talk about the Code
- Rollback?
- Patience
- Incomplete Understanding



Alexa for Algorithms



If you have
the keyboard,
you can't have
the ideas

Mob % Typist

1.Collaborate & Discuss

2.What is the next step?

3.Talk to the Typist

4.Park other issues

The team is like an
extended brain,
it needs to talk out
loud to know what it
thinks

Mob Rotation



Navigator



Typist



* reconstruction

Facilitator?

Navigator

Navigator

Navigator

Typist

Timer

* reconstruction

Mobbing Timer

Left Click to Increase, Right Click to Decrease, or use scrollwheel

00:05

Chris van Eijk
Sven van Miert
Hansy

Add Marker

Remove Marker

Move Marker Up

Move Marker Down

Clear Markers

New Driver

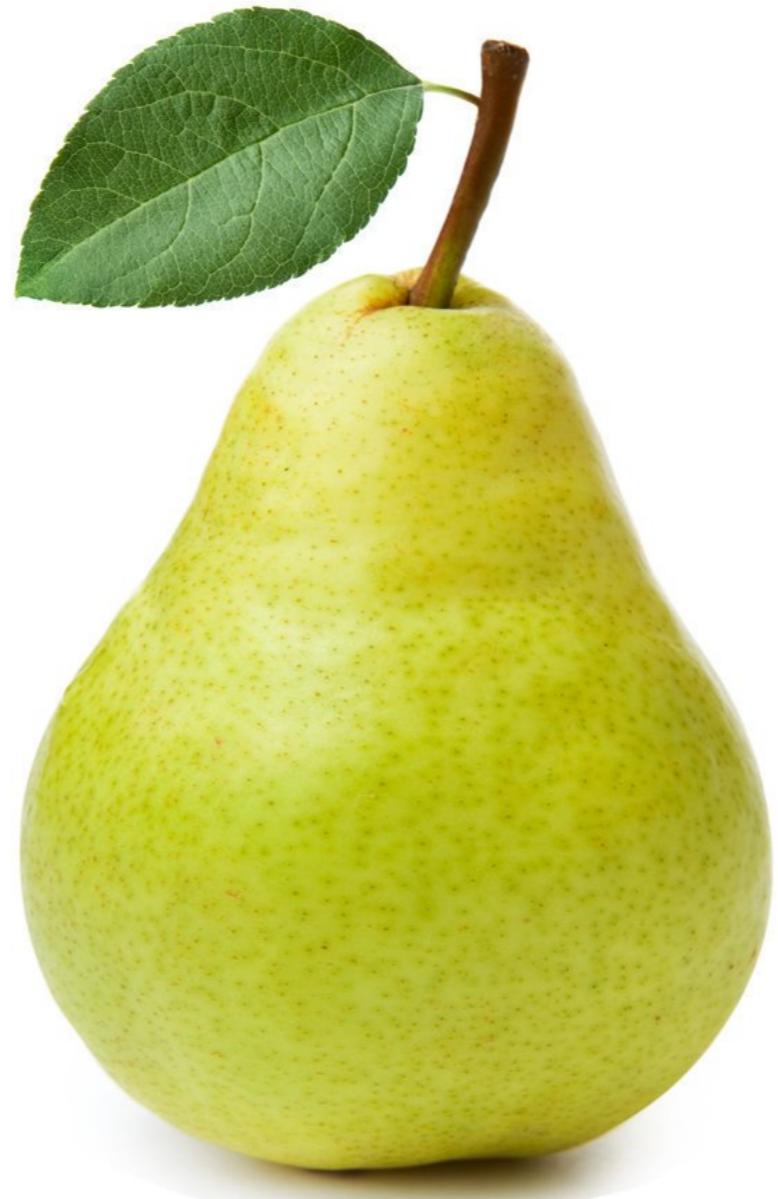
Previous Driver

End Team

Start Mobbing!

End Mobbing

Strong Style
Pairing



Have you ever
had a bug?

The Pragmatic Programmer



from journeyman
to master

Andrew Hunt
David Thomas

Foreword by Ward Cunningham





Talk with a Duck

You are now in an online chat room with:

- Cyberduck is a mock Rogerian psychotherapist (for debugging).
 - The original concept program was described by Joseph Weizenbaum in 1966.
 - Terminal themed implementation was created by Norbert Landsteiner in 2005.
 - This debugging themed implementation by Ben Holland in 2017.

CYBERDUCK: Please tell me what's been bothering you about your code.

YOU: ■

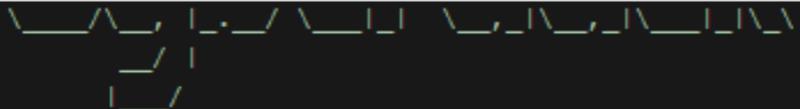
References

Cyberduck is based on work by Joseph Weizenbaum and Norbert Landsteiner.

- Weizenbaum, Joseph. **ELIZA – A Computer Program For the Study of Natural Language Communication Between Man and Machine.** *Communications of the ACM*, Volume 9, Issue 1, pages 36-45, January 1966.
 - Elizabot: <http://www.masswerk.at/elizabot>



Talk with a Duck



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```
CYBERDUCK: Please tell me what's been bothering you about your code.  
YOU: it's just not SOLID  
CYBERDUCK: What does that suggest to you ?  
YOU: I suck  
CYBERDUCK: Can you elaborate on that ?  
YOU: my software skills are not good  
CYBERDUCK: Does that suggest anything else which belongs to you ?  
YOU: my life in general  
CYBERDUCK: Why do you say your life in general ?  
YOU: it's all going wrong  
CYBERDUCK: Lets discuss further why your software skills are not good.  
YOU: no, I'm going back to VB  
CYBERDUCK: You are being a bit negative.  
YOU: █
```

References

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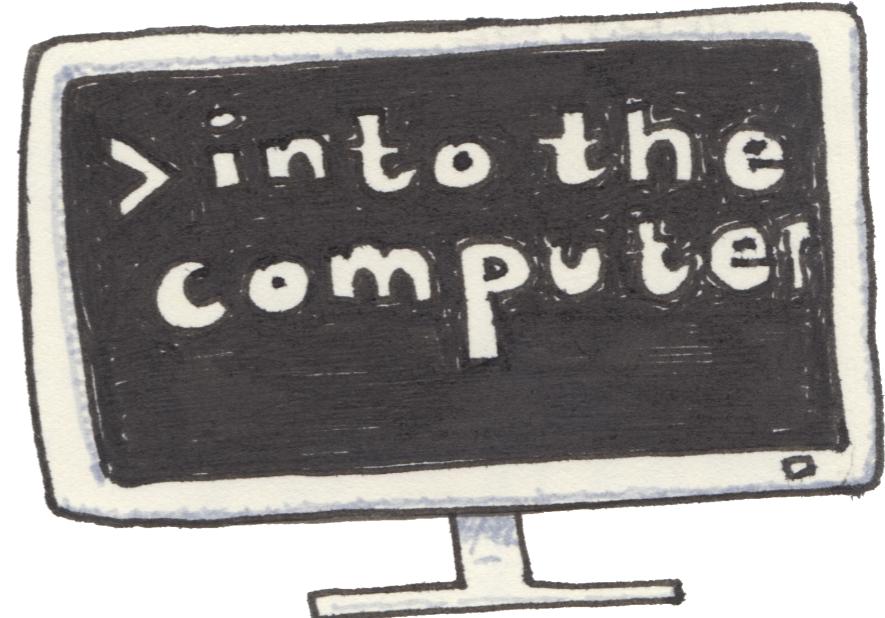




...TO GO
FROM YOUR
HEAD...



IT MUST GO
THROUGH



@deejayshaham
we are

Finding the right level

- Abstractions
- Language syntax
- Files, line numbers
- Key presses

```
7     public static string ToSoundex(this string text)
8     {
9         if (string.IsNullOrEmpty(text))
10            return string.Empty.PadRight(SoundexLength);
11
12        var encoded = new StringBuilder();
13
14        // keep first letter
15        encoded.Append(text.First());
16
17        int encodeValue = NotFound;
18        int lastValue = NotFound;
19
20        foreach(char letter in text.ToLower().Skip(1))
21        {
22            encodeValue = MapCharToSoundexCode(letter);
```

When?

When to...

- Always :)
- New work
- Hard problems
- Across Handoffs

When not to...

- Sys admin and Dev Ops (pair instead)
- Long running tasks
- Small problems
- JFDI

SCOTT LOGIC

ALTOGETHER SMARTER

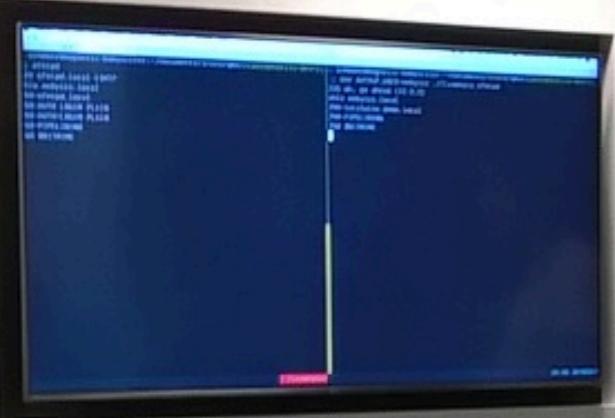
SCOTT LOGIC
ALTOGETHER SMARTER

THE MORE YOUR
SWEATS IN PRACTICE



LED IN BA

www.scottlog



Disagreements
& Uncertainty



Inspect

& Adapt

- Informal Huddle
- As often as you need to:
 - How are we doing?
 - What is easy?
 - What is hard?

**Turn up
the Good!**

Resources

Mob-Positive Teams

- Hunter Industries
- Industrial Logic
- Alaska Airlines
- LateRooms.com
- pluralsight.com
- GDS (gov.uk)
- Unruly Media
- Blue Fruit
- Menlo innovations
- ...and many more

- Mobbing - <http://mobprogramming.org>
- Woody Zuill - <https://www.industriallogic.com>
- Chris Lucian - <http://www.chislucian.com/>
- mob timer - <https://github.com/dillonkearns/mobster>
- Strong style pairing - <https://lewellynfalco.blogspot.co.uk/>
- Amy Edmondson - <https://hbr.org/2013/12/the-three-pillars-of-a-teaming-culture>

Mob Programming

A Whole Team Approach



By Woody Zuill and Kevin Meadows

The Mob Programming Guidebook



Llewellyn Falco & Maaret Pyhäjärvi

<https://leanpub.com/mobprogramming>

THE CODING DOJO HANDBOOK

*a practical guide to
creating a space
where **good** programmers
can become **great** programmers*



Emily Bache
Foreword by Robert C. Martin

<https://leanpub.com/codingdojohandbook>

MARK XP: □□□

Whenever you...

- ...Yield to the less privileged voice
- ...Contribute an idea
- ...Ask questions till you understand
- ...Listen on the edge of your seat

Or when you...

- ...Make an XP action from a previously completed Level 1 playbook

THE MOBBER

"Let's do this."

Shoulder to shoulder with the best,
your relaxed manner belies what you
know to be true: nothing can stop
this mob from shipping.

WHEN YOU MARK YOUR LAST XP BOX...

Add a new playbook and
a MOBBER badge
to your mob



MOB PROGRAMMING: THE ROLE PLAYING GAME by Willem Larsen CC-BY-SA-NC 2016

Powered by the Apocalypse - thanks to BigBadCon 2016 for inspiration

Spy image CC BY 3.0 Delapouite

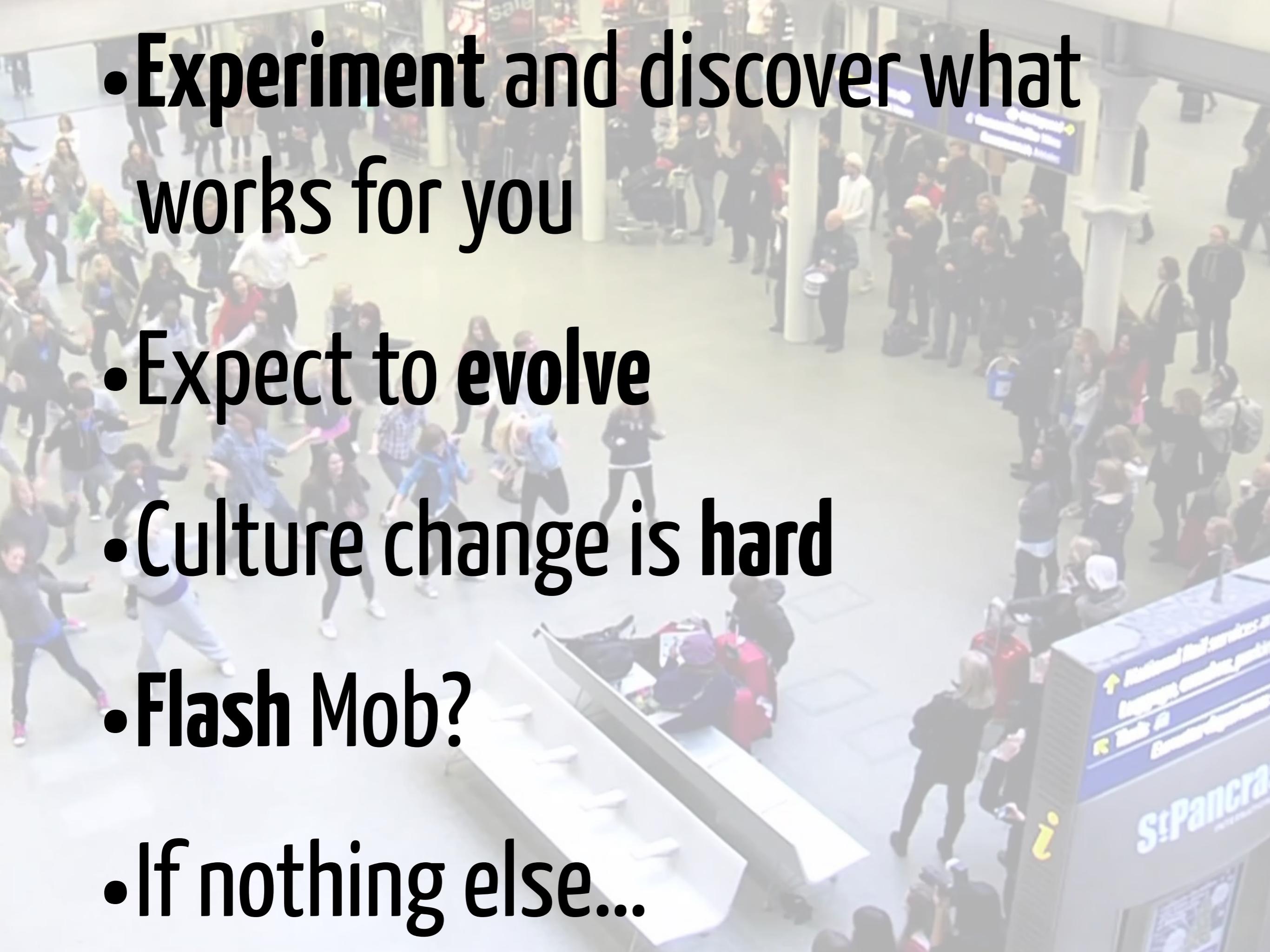
LEVEL 1

<https://github.com/willem Larsen/mobprogrammingrpg>

Problem Solving

Bray, R. M., Kerr, N. L., & Atkin, R. S. (1978).
"Effects of group size, problem difficulty, and
sex on group performance and member
reactions." *Journal of Personality and Social
Psychology*, 36, 1224-1240.

What can you
take away?

A large, blurred photograph of a crowded public space, likely a train station platform. In the foreground, a person is seen from behind, holding a megaphone and speaking into it. The background is filled with many other people walking or standing.

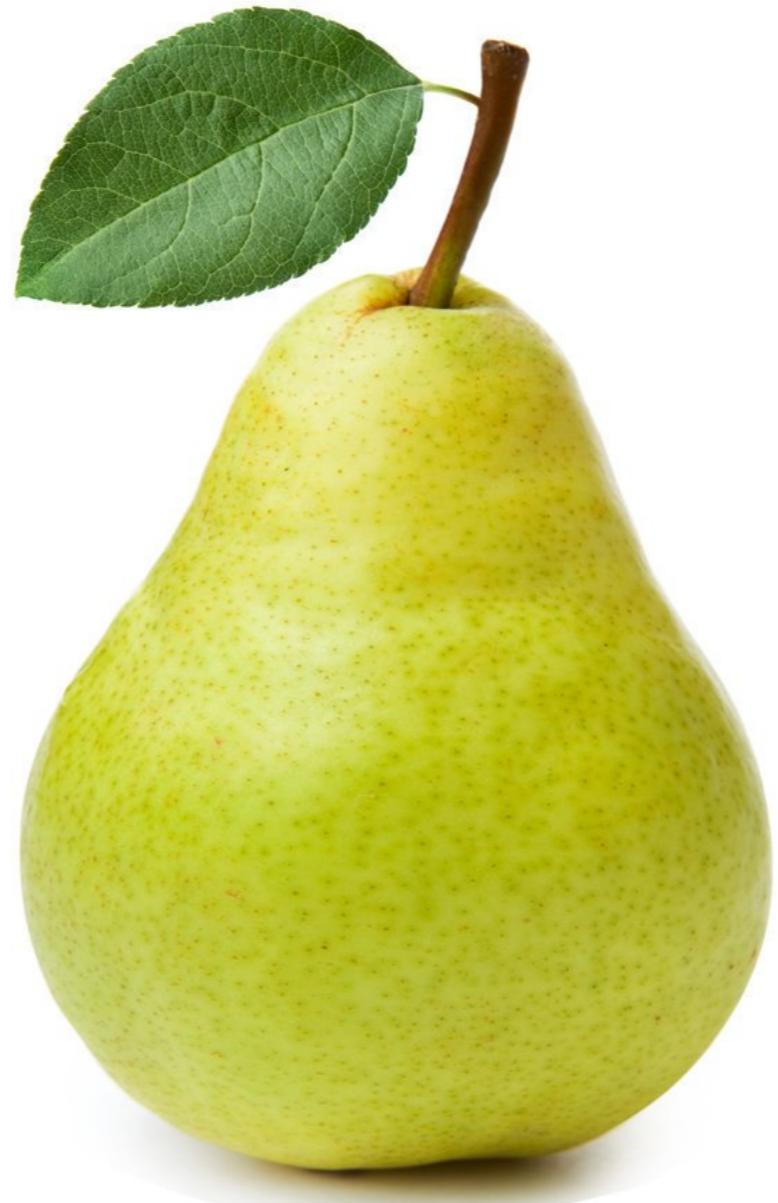
•Experiment and discover what works for you

•Expect to evolve

•Culture change is hard

•Flash Mob?

•If nothing else...







ONE LAST THING



Intriguing Notion

Mob Programming A Whole Team Approach



mobprogramming.org
seamless distributed teams

© 2014 Mob



- 
- A photograph of a man with short brown hair and glasses, wearing a dark t-shirt. He is standing outdoors with a large, shaggy brown dog on a red leash. In the background, there's a white house, some trees, and a stone wall.
- @deejaygraham
 - deejaygraham@icloud.com
 - deejaygraham.github.io

That's all Folks!