

**Married
to the Mob
(programming)**

hey hi hello

derek graham

@deejaygraham



sage



 **Jeremiah Smith** added you to list 3h
Super Interesting People

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_groupo = { .usage = ATOMIC_INIT(2) };

struct group_info *groups_alloc(int gidsizesize){

    struct group_info *group_info;
    int nblocks;
    int i;

    nblocks = (gidsizesize + NCROUPS_PER_BLOCK - 1) / NCROUPS_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->ngroups = gidsizesize;
    group_info->nblocks = nblocks;
    atomic_set(&group_info->usage, 1);

    if (gidsizesize <= NCROUPS_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

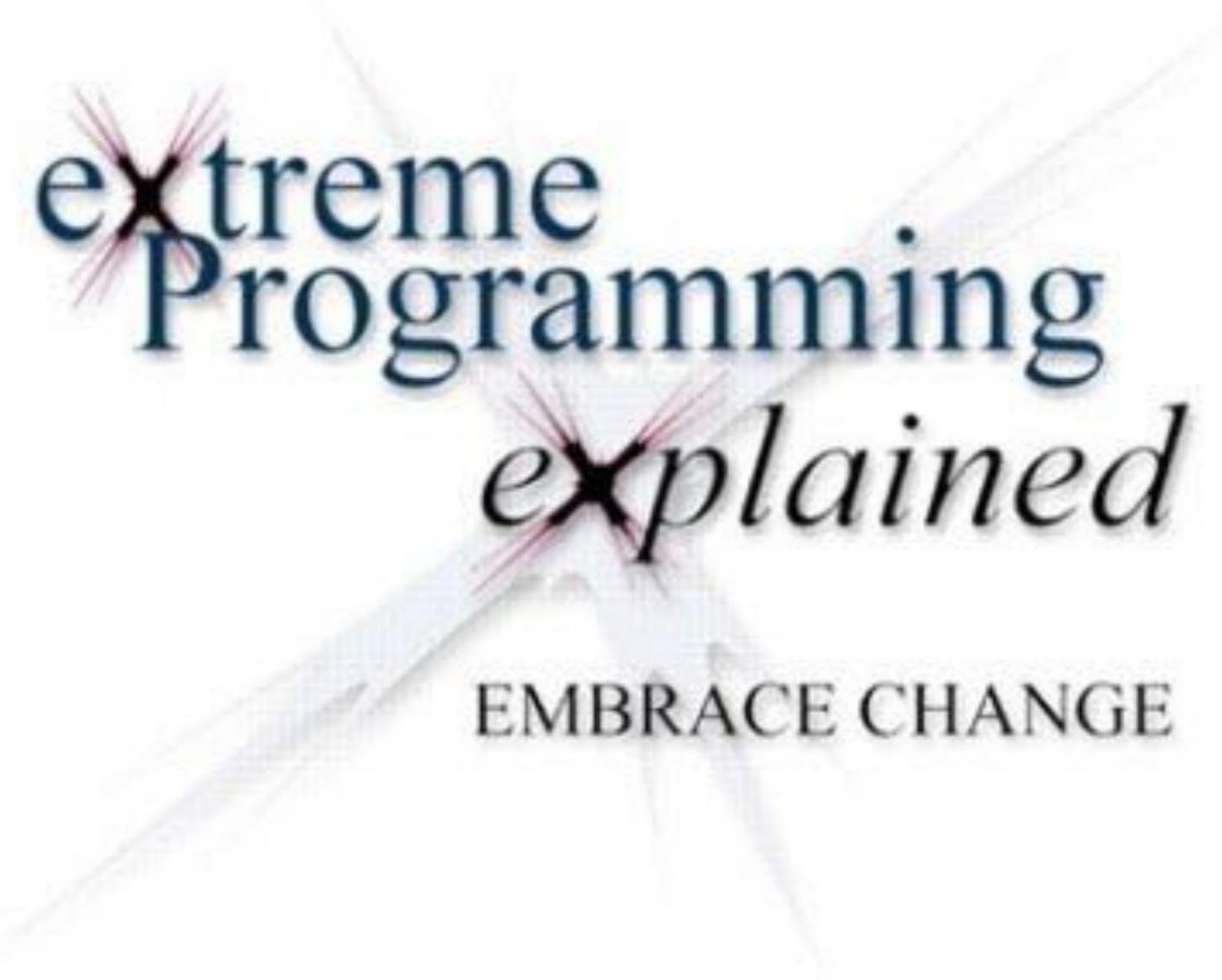
```



out_undo_partial_alloc:

while (--i >= 0) {

free_page((unsigned



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



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

– Our Team

Doug Williams - A Day in the Life of a Retired Astronaut
Last day of Retrospective: 03-16-2015



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

-Woody Zuill

Mob = XP++

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

-Rachel Davies (Agile Coach)

Mob !=



Mechanics

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



* reconstruction

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.

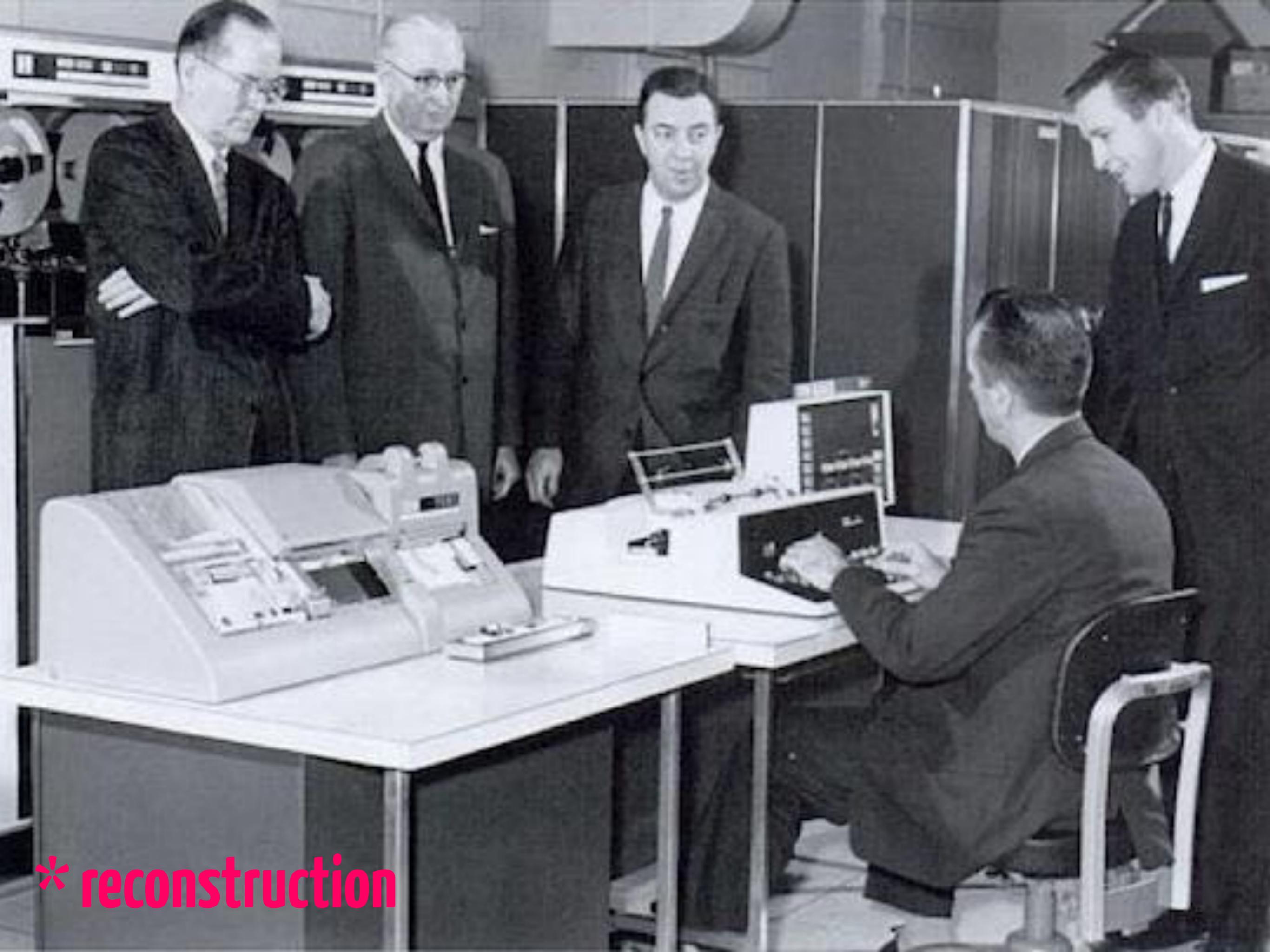
Driver

*reconstruction

A photograph of a young boy with dark hair, wearing a dark flight suit with red stripes on the shoulders, sitting in the cockpit of a small airplane. He is looking upwards and to his right with a thoughtful expression. The background is a dark, star-filled space visible through the cockpit windows.

* reconstruction

Navigator



* reconstruction

Facilitator?

Navigator

Navigator

Navigator

Driver

* reconstruction



Mob Rule(s)

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

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

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

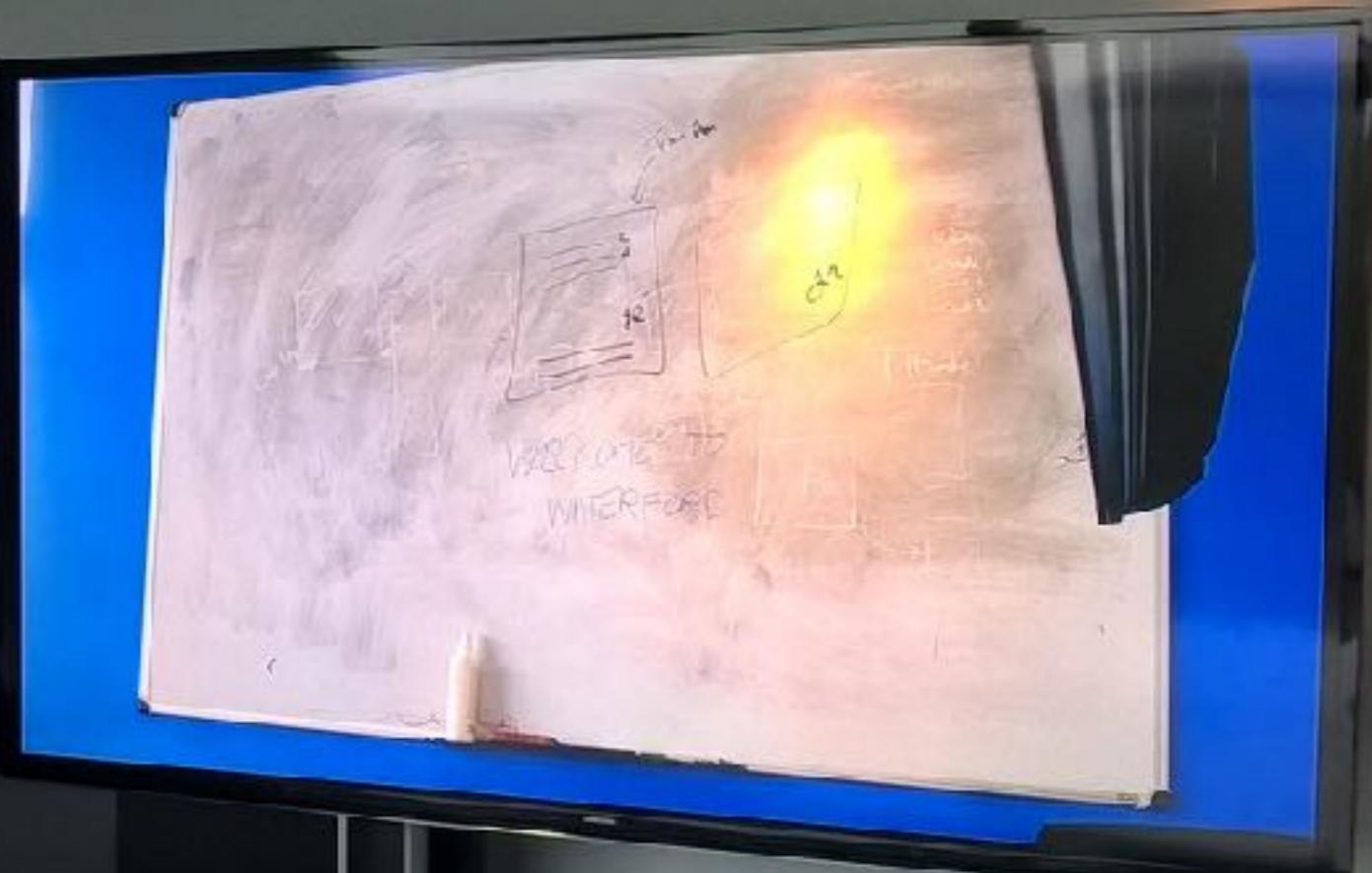
Mob % Typist

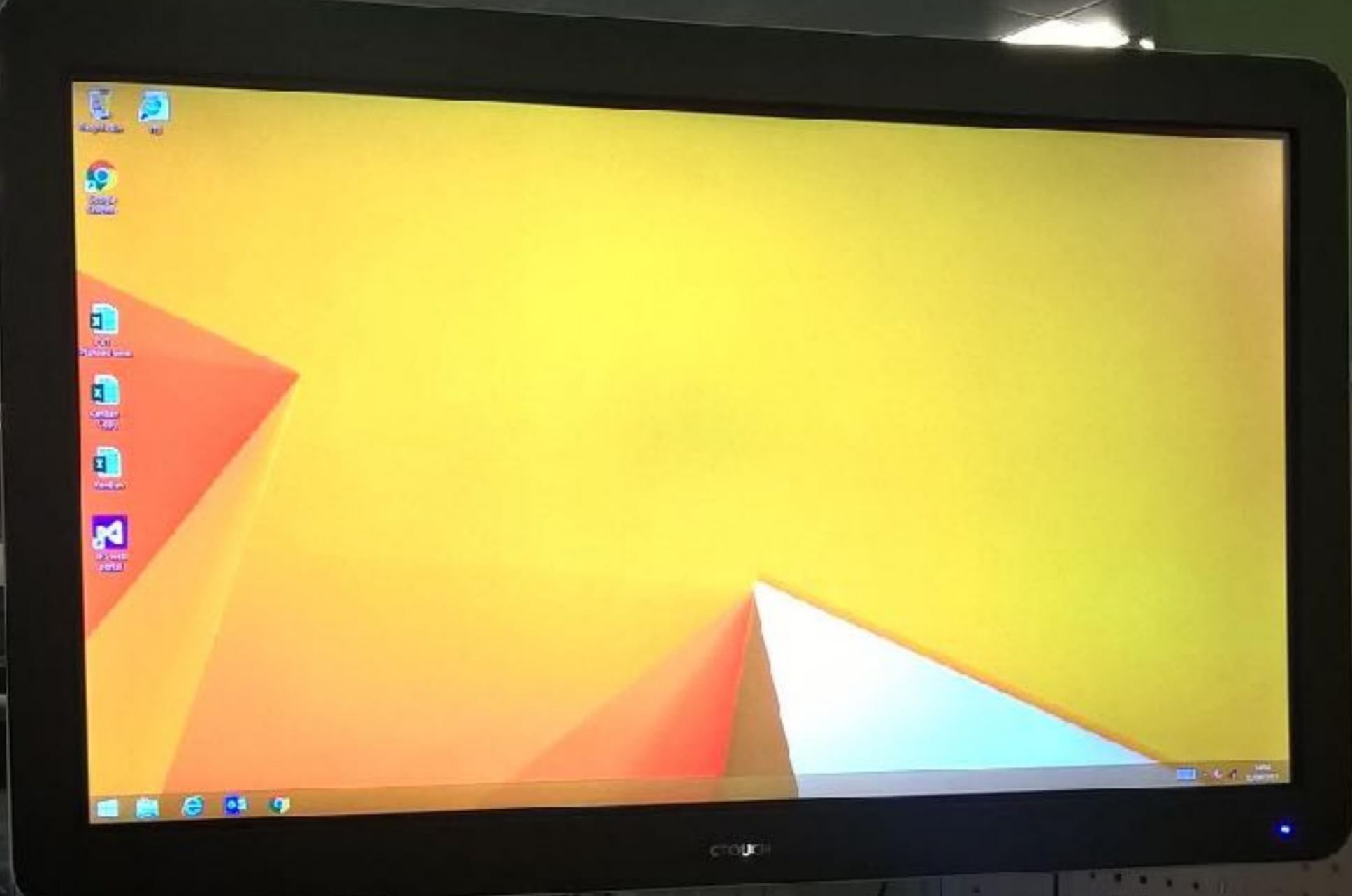
Mob

- 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

Environment





CHU

**Other computers are
allowed!**

Rotation



* reconstruction

Facilitator?

Navigator

Navigator

Navigator

Typist

Timer

* reconstruction

Mobbing Timer

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

00:05

Chris von Eitzen
Time vs. Score
Memory

Add Marker

Remove Marker

Move Marker Up

Move Marker Down

Clear Markers

New Driver

Reversed Driver

Add Team

Start Mobbing!

End Mobbing

Team work

When to mob...

- Always :)
- Green field projects
- New work
- Hard problems
- Code Merges?
- Group learning

When not to...

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

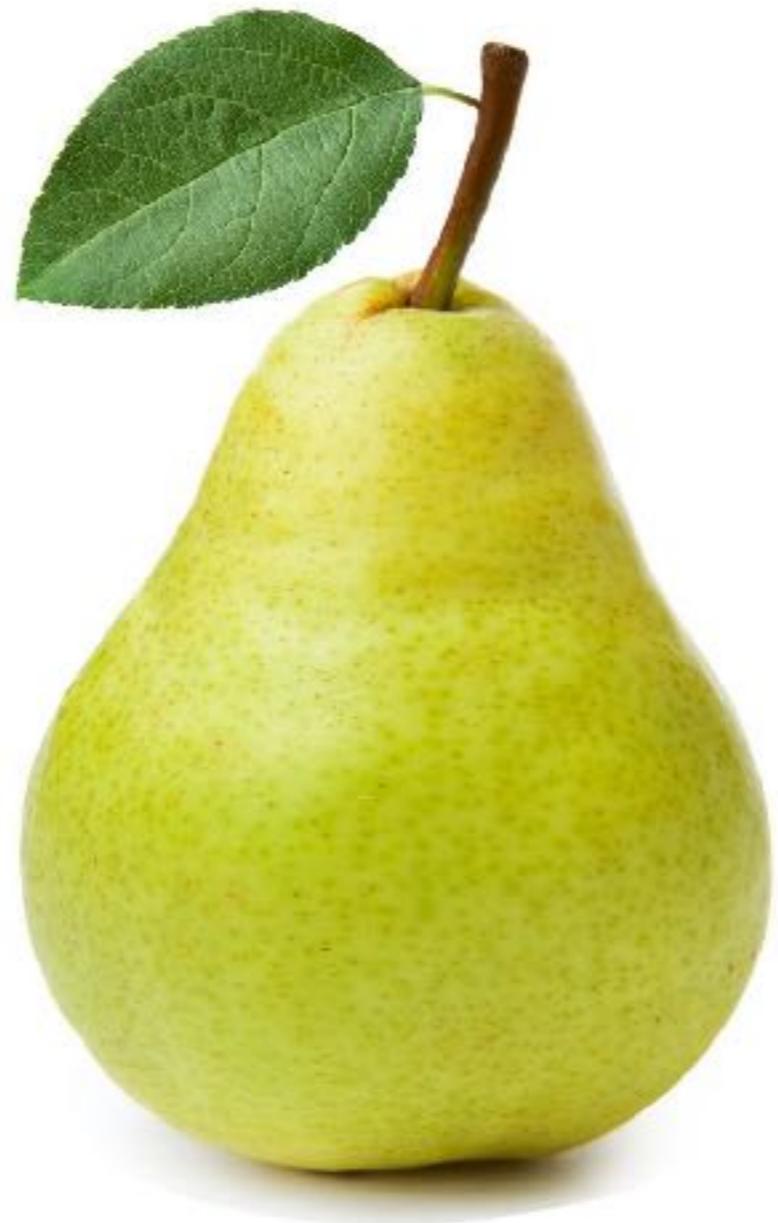
Disagreements & Uncertainty



Inspect
& Adapt

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

Turn up the Good!



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

$$N = \sum_{j=1}^m N_j + (N - \sum_{j=1}^m N_j) R_j \leq N - \sum_{j=1}^m N_j$$

- Cyberduck is a mock Hungarian psychotherapist (for debugging).
 - The original concept program was described by Joseph Weizenbaum in 1966.
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 - This debugging themed implementation by Ber Holland in 2017.

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: Let's 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

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

- 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.
 - Ellzabot: <http://www.masswerk.at/ellzabot>



**“For an idea to go from
your head into the computer,
it MUST go through
someone else's hands.”**

-Llewellyn Falco

Finding the right level

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

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>

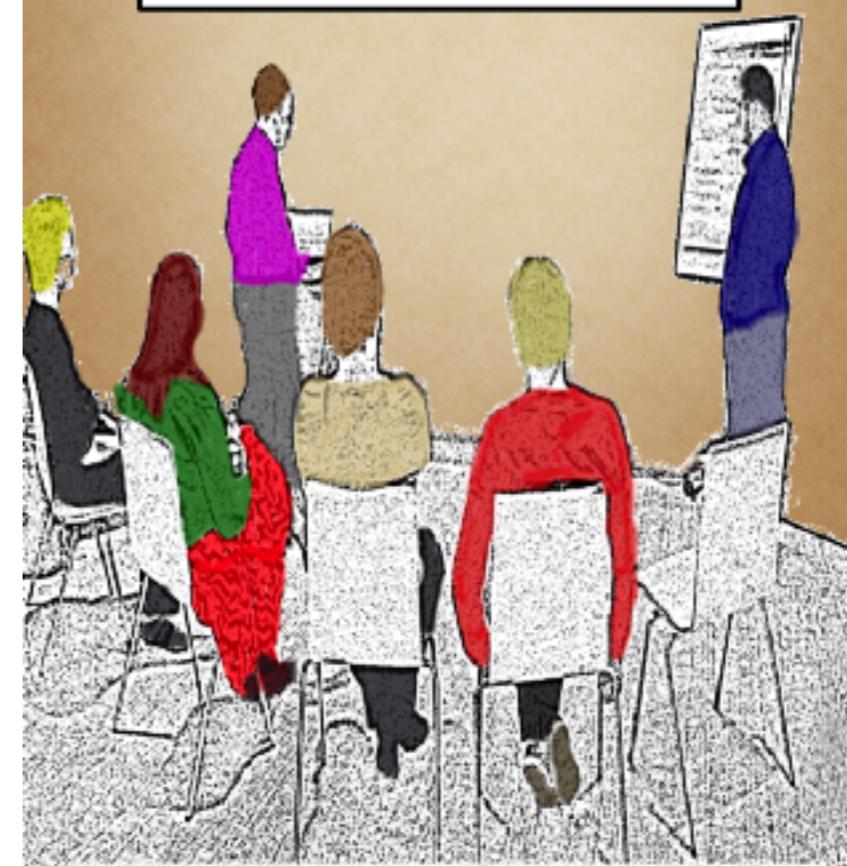
Mob Programming

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

<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?

- 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



John Sonmez
Software Development Coach
www.johnsonmez.com

A photograph of a man with a beard and glasses, wearing a black t-shirt, holding a small, shaggy dog. The man is looking towards the camera. The background shows a garden with a greenhouse and trees.

Me

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That's all Folks!