HOW

GITHUB

WORKS

THE STORY BEGINS WITH

4 FOUNDERS IN A COFFEE SHOP

4 FOUNDERS IN A BAR

4 FOUNDERS IN A RESTAURANT

4 FOUNDERS IN A PLANE

4 FOUNDERS IN A JAIL CELL

4 FOUNDERS IN A SOMEWHERE

NO OFFICE

HAD OTHER JOBS

THIS WAS THE START OF github

GITHUB WAS FORCED TO BE

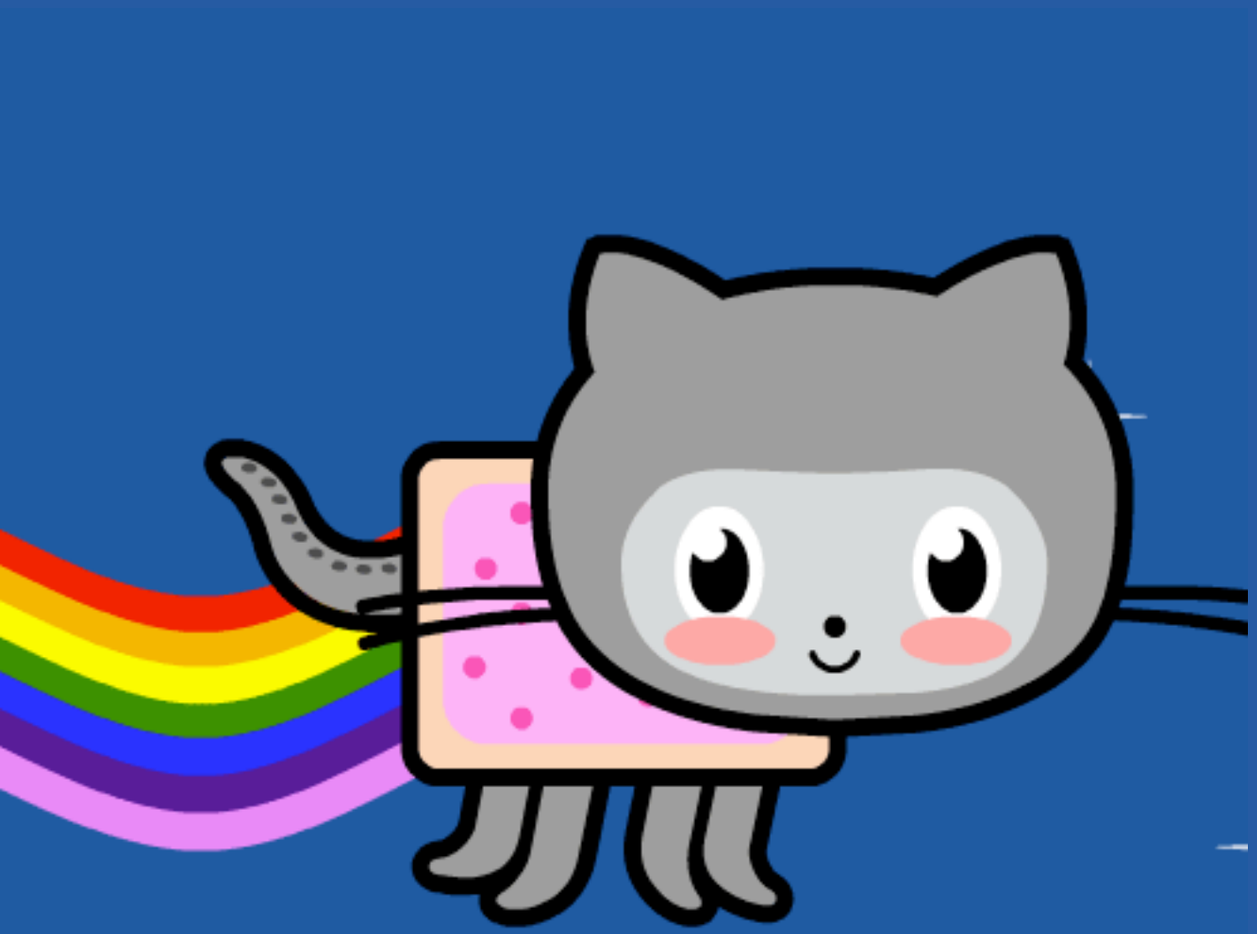
DISTRIBUTED FLEXIBLE HAPPY

TURNS OUT,
GREAT WAY TO WORK

THIS TALK
IS KIND OF ABOUT
GITHUB

BUT IT'S REALLY ABOUT IMPROVING YOUR COMPANY

@HOLMAN



github

SOCIAL CODING

HOW GITHUB WORKS

ZACHHOLMAN.COM/POSTS/HOW-GITHUB-WORKS

HOURS ARE BULLSHIT

WORKIN' NINE TO FIVE

WHAT A WAY TO MAKE A LIVIN'

(DOLLY PARTON WAS BASICALLY A PROGRAMMER)

FOR MANY PROGRAMMERS,
9-5 DAYS DON'T WORK.

CRAFTING CODE IS A HUGELY CREATIVE ENDEAVOR.

YOU CAN'T FORCE
CREATIVITY TO HAPPEN
BETWEEN 9 AND 5.

THE BEST SOLUTIONS HAPPEN WHEN YOU'RE IN THE ZONE

OUR OFFICE

EARLY BIRDS
NIGHT OWLS
NINE-TO-FIVERS
INTERNATIONAL EMPLOYEES
TRAVELING EMPLOYEES

EMBRACEFLEXIBILITY

HO
AND
VEEK
IT!

WORKING LONG HOURS
ISN'T A BADGE OF HONOR

...IT'S A BADGE
OF FOOLISHNESS

ALL-NIGHTERS ARE A RECIPE FOR REDOING EVERYTHING AGAIN LATER

MARATHON CODE SESSIONS

DRAIN YOU MENTALLY
LEAD TO POOR CODE QUALITY
IMPACT FUTURE CODE

WE WANT TO GET

THE BEST WORK

FROM OUR EMPLOYEES

THAT HAPPENS WHEN THEY ARE

HAPPY, FRESH, AND CREATIVE

I'VE BEEN TOLD:

STARTUPS ARE ONLY FOR SINGLE 20-SOMETHINGS

FAMILIES

GITHUB

FAMILY

BEING LESS HOUR-CENTRIC =

MORE FAMILY-FRIENDLY

HAPPY FAMILIES,
HAPPY COWORKERS

HAPPY COWORKERS,
PRODUCTIVE COMPANIES

TRUST
YOUR EMPLOYEES

YOU HIRED THEM, AFTER ALL

YOUR REAGANISM FOR TODAY

TRUST EMPLOYEES,
HELP THEM OUT,
THEN VERIFY THEY'RE DOING THE WORK.

THIS REQUIRES COMMUNICATION

ARE THEY COMMITTING?

ARE THEY PARTICIPATING?

WHAT'S THEIR CODE LOOK LIKE?

HOURS ARE BULLSHIT

WORRY ABOUT GOOD WORK

BE

ASYNCHRONOUS

ASYNCHRONOUS

A DISTRIBUTED WAY OF GETTING THINGS DONE

GEOGRAPHICALLY-DISTRIBUTED

ATTENTION-AWARE

TEAM-ORIENTED

MINIMAL PROCESS

GITHUB**HQ**

TURNS OUT,
THE WORLD IS LARGER THAN
JUST SAN FRANCISCO.

WE WANT TO HIRE THE BEST

DISTRIBUTED WORK NEEDS TO BE A PRIORITY FOR US

FLEXIBLE HOURS

HELP WITH FLEXIBLE LOCATION

LIMIT REQUIRED IN-PERSON CONTACT

CHAT

BEER:30

FACETIME

RECORDED TALKS

SUMMIT 2010

SUMMIT 2011

GITHUB SUMMIT 2012

GET PEOPLE MEETING IN REAL-LIFE!

ENCOURAGE

STRUCTURED TEAM BUILDING

GEOGRAPHICALLY-DISTRIBUTED

ATTENTION-AWARE

TEAM-ORIENTED

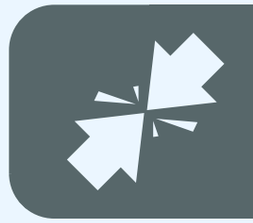
MINIMAL PROCESS

WE WANT DEVELOPERS

IN THE ZONE™

MINIMIZE DISTRACTIONS

THE ZONE IS DIFFICULT TO RE-ENTER



NO TECHNICAL MEETINGS

NO STANDUP, DAILY, OR PLANNING MEETINGS

NO IN-PERSON DISTRACTIONS

INSTEAD, PING OVER CHAT

NO MANAGERS
THEY JUST DISTRACT

WE CAN WORK THIS WAY BECAUSE:

PRODUCT COMPANY

DOGFOOD

FULL OWNERSHIP

PROFITABLE

github

EACH COMPANY IS DIFFERENT

FIND OUT WHAT WORKS BEST FOR YOURS

GEOGRAPHICALLY-DISTRIBUTED

ATTENTION-AWARE

TEAM-ORIENTED

MINIMAL PROCESS

github
TEAMS

github:mac

github:help

github:shop

github:enterprise

github:gist

github:[redacted]

github:[redacted]

github:pages

SMALL TEAMS LET YOU MOVE QUICKLY & INDEPENDENTLY

30+ROOMS:

THE DANGER ROOM
THE SERIOUS ROOM
THE ENTERPRISE ROOM
THE DESIGN ROOM
THE SUPPORT ROOM
THE INTERNAL ROOM
THE NATIVE ROOM
THE (REDACTED) ROO
THE MOBILE ROOM
THE OPS ROOM
THE NOTICES ROOM
THE (REDACTED) RO

SMALL TEAMS LET YOU FOCUS

GEOGRAPHICALLY-DISTRIBUTED

ATTENTION-AWARE

TEAM-ORIENTED

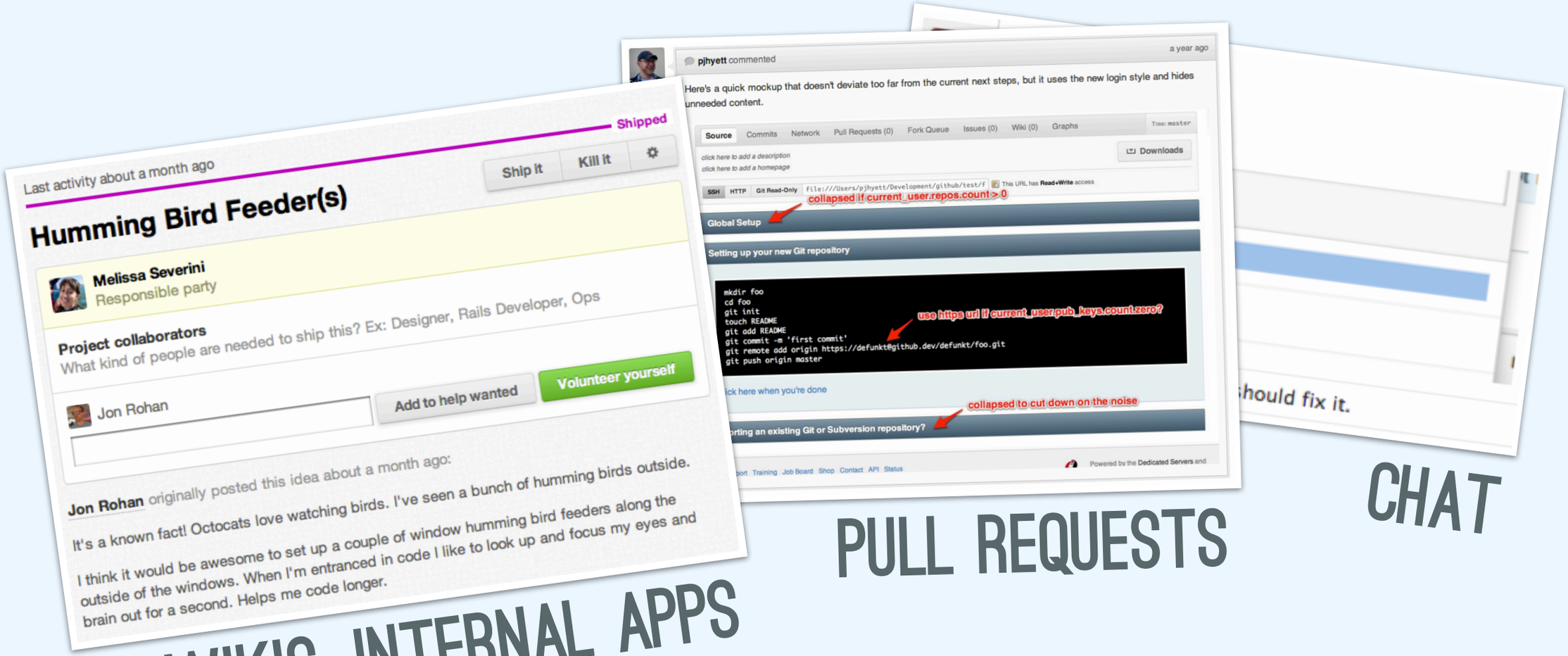
MINIMAL PROCESS

HOW DO WE ACTUALLY DO ALL THIS?

PLAN - BUILD - SHIP

PLAN 31

SHOW IT AS SOON AS POSSIBLE



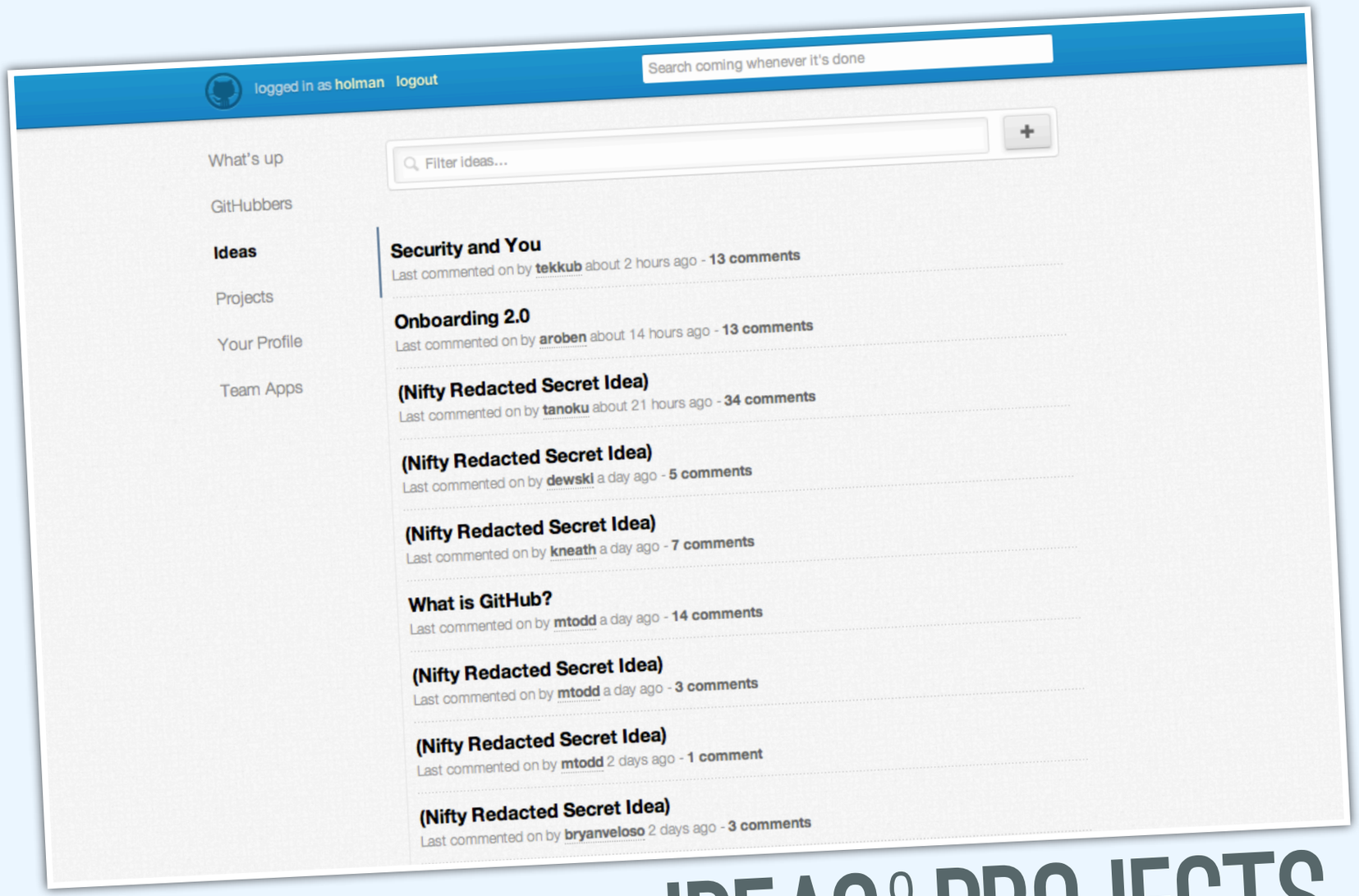
WIKIS, INTERNAL APPS

PULL REQUESTS

CHAT

MAKE IT OKAY TO SAY "NO"

PLAN 31



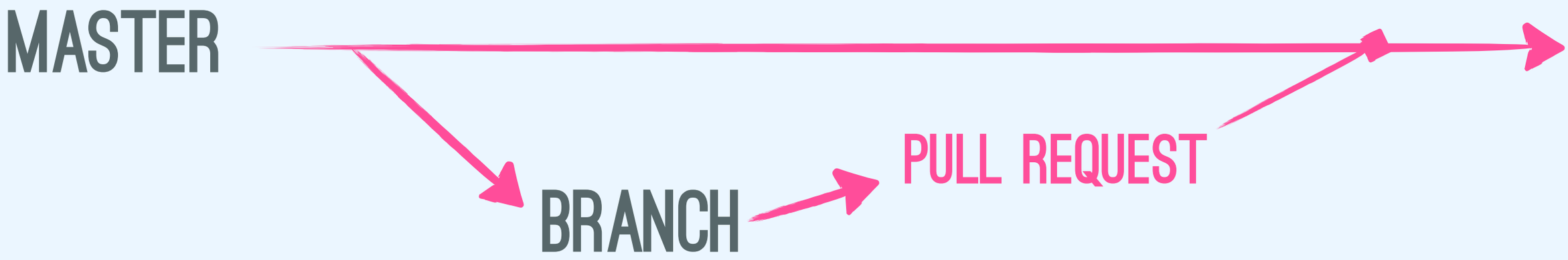
IDEAS&PROJECTS

EVERYONE CONTRIBUTES

SEE STATUS UPDATES

AVOID ABANDONMENT

SIMPLE **BRANCHING**



BUILD

SIMPLE **BRANCHING**

DESIGNER FRIENDLY

("NON-TECHNICAL")

BUILD

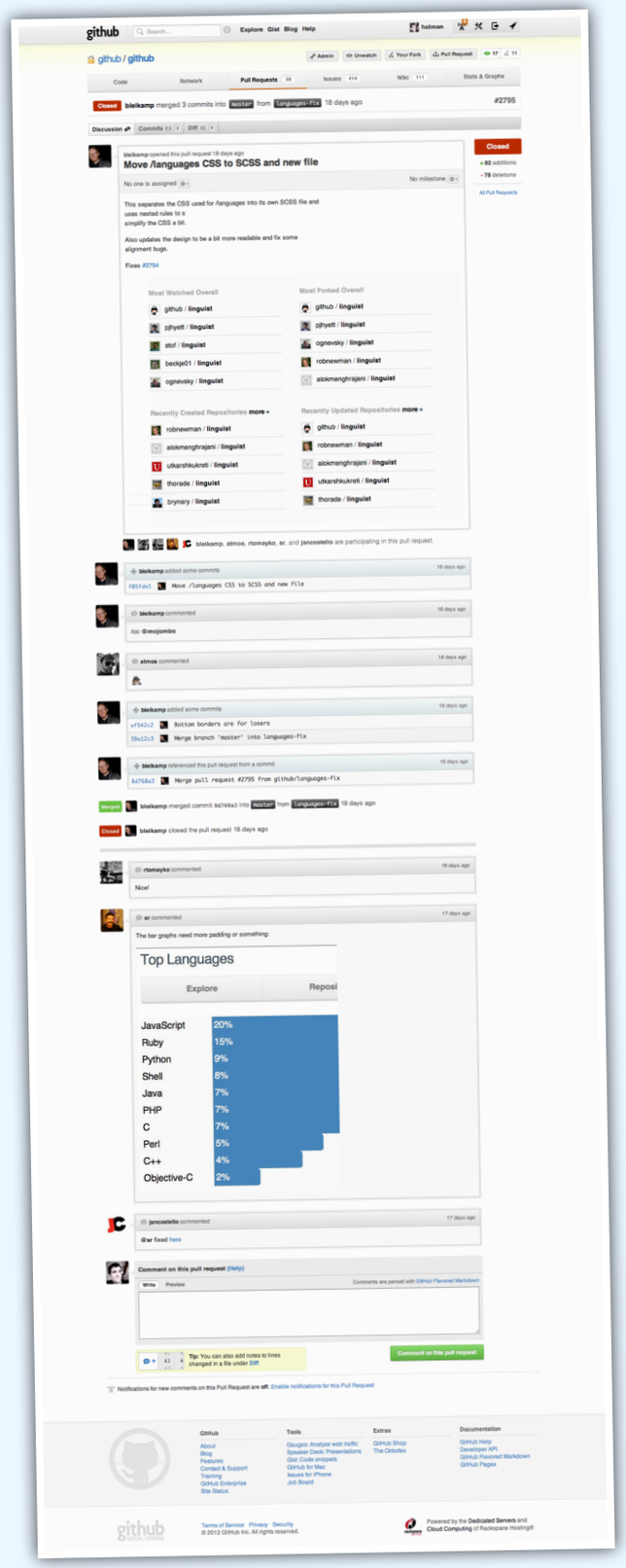
SIMPLE **BRANCHING**

SIMPLE **ROLLBACK**

PARTIAL DEPLOYS

STAFF-ONLY
SPECIFIC SERVERS
SPECIFIC PROCESSES

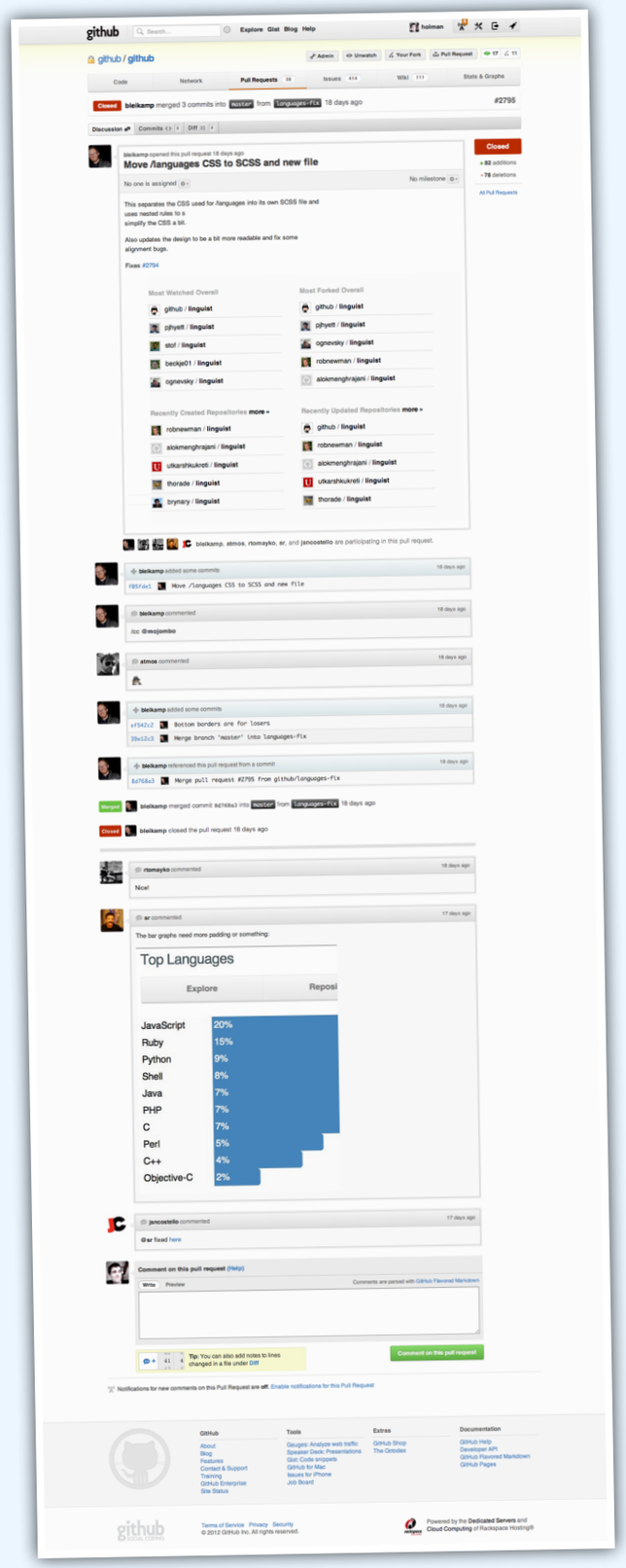
BUILD 31



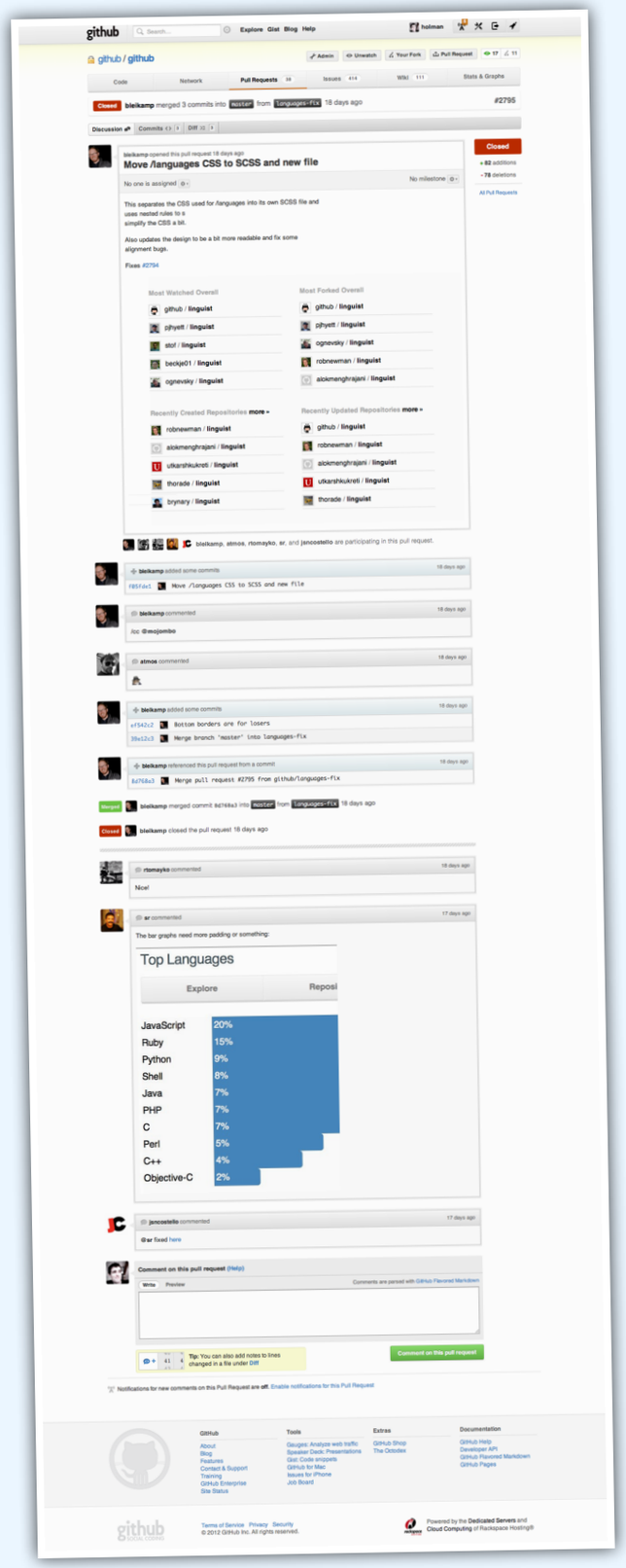
PULL REQUESTS ARE DISCUSSIONS

THAT IMPROVE CODE QUALITY

BUILD 31



PUSH **BRANCH**
GET **FEEDBACK**
MAKE **IMPROVEMENTS**
MERGE **BRANCH**



ASYNCHRONOUS, NON-INVASIVE

EXTREMELY VISIBLE FOR YOUR ORG

ONE-CLICK MERGE BUTTON

REPLACES TRADITIONAL CODE REVIEW

BUILD 31

SUPERFASTTESTS

BUILD 31

8000 ASSERTIONS IN 250 SECONDS

BUILD 31

A SLOW TEST IS A REGRESSION

SHIP 31

GRAPH EVERYTHING

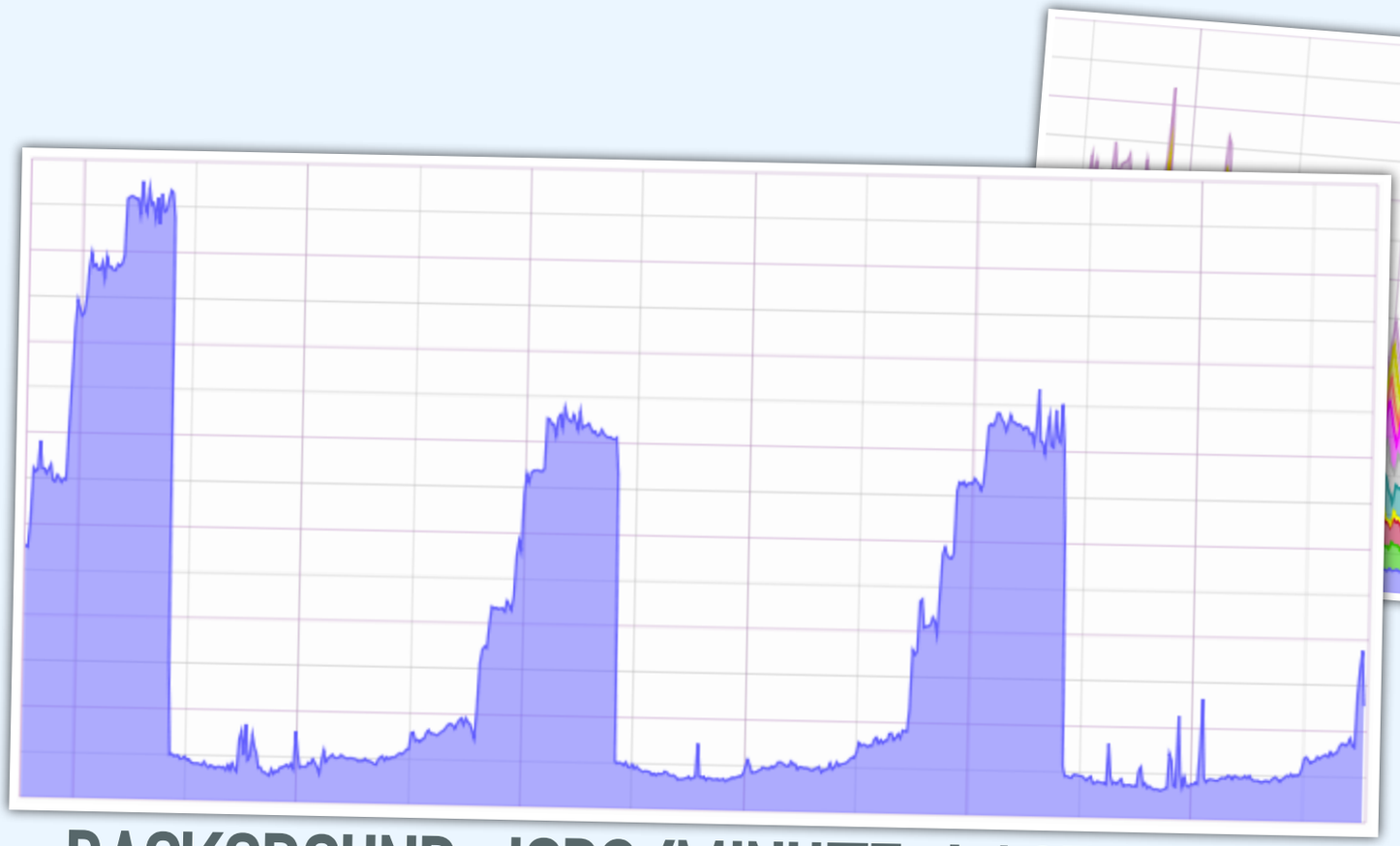
GRAPH EVERYTHING

SHIP

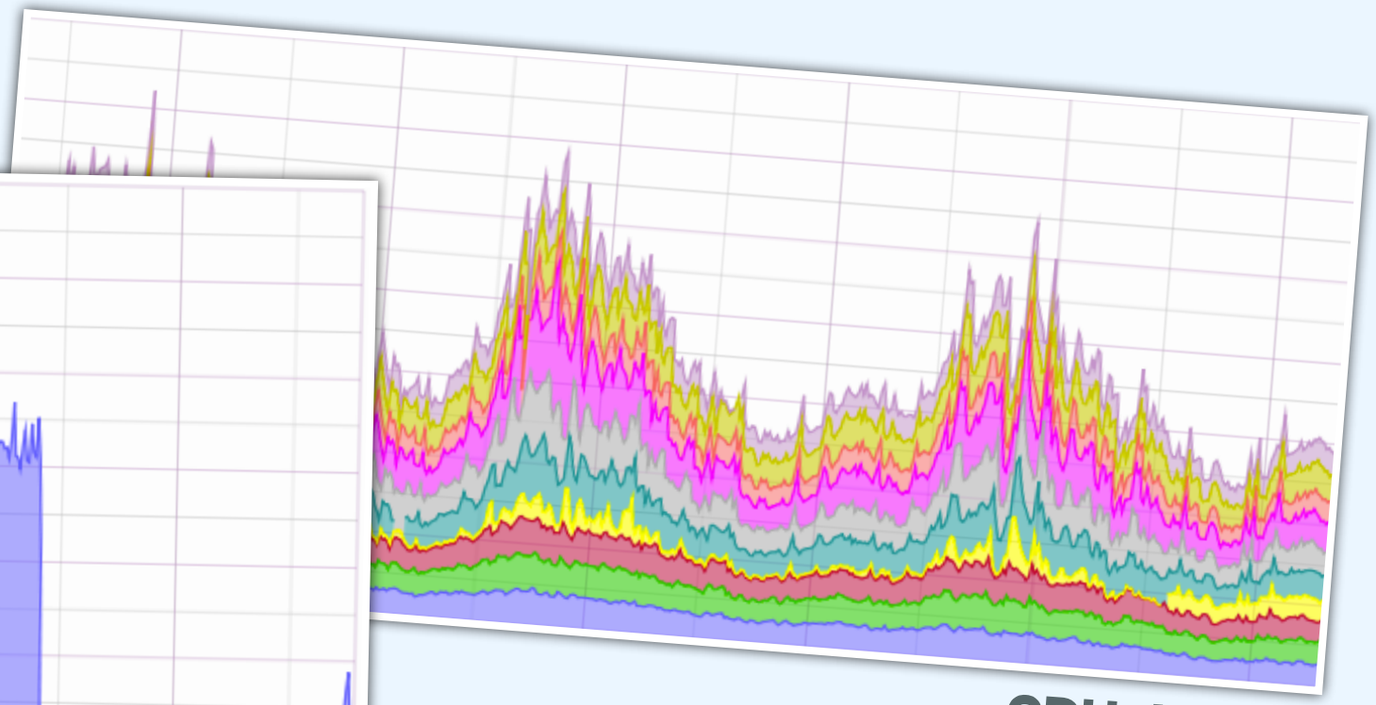
COLLECTING METRICS GIVES YOU A DIFFERENT PERSPECTIVE ON PERFORMANCE

GRAPH EVERYTHING

SHIP 31



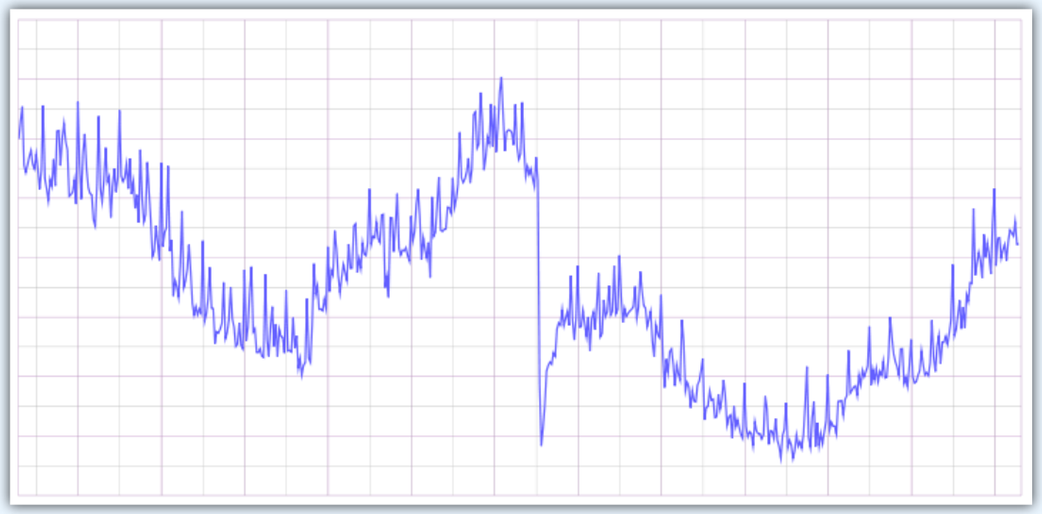
BACKGROUND JOBS/MINUTE, LAST 3 DAYS



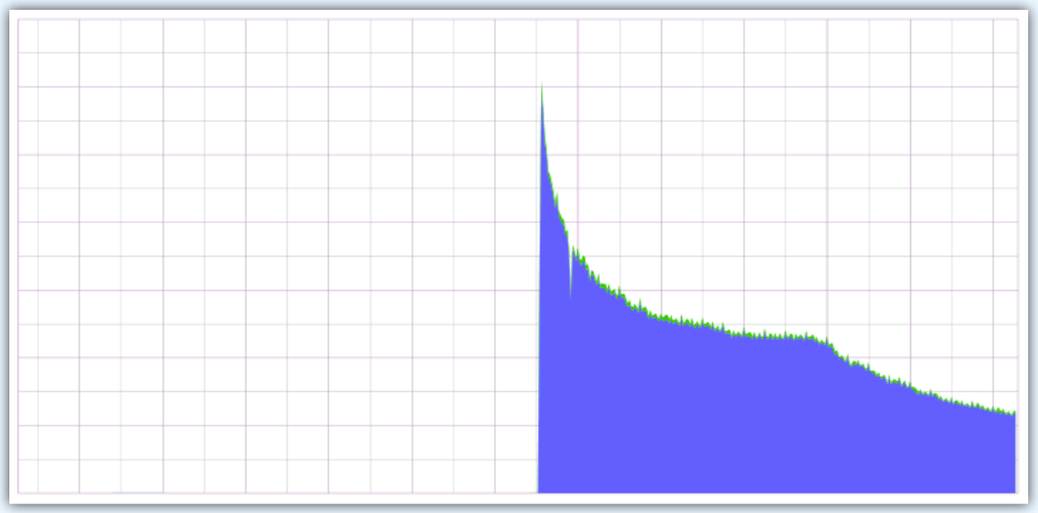
CPU LOAD

GRAPH EVERYTHING
(DURING MARCH 7 PUBLIC KEY RESET)

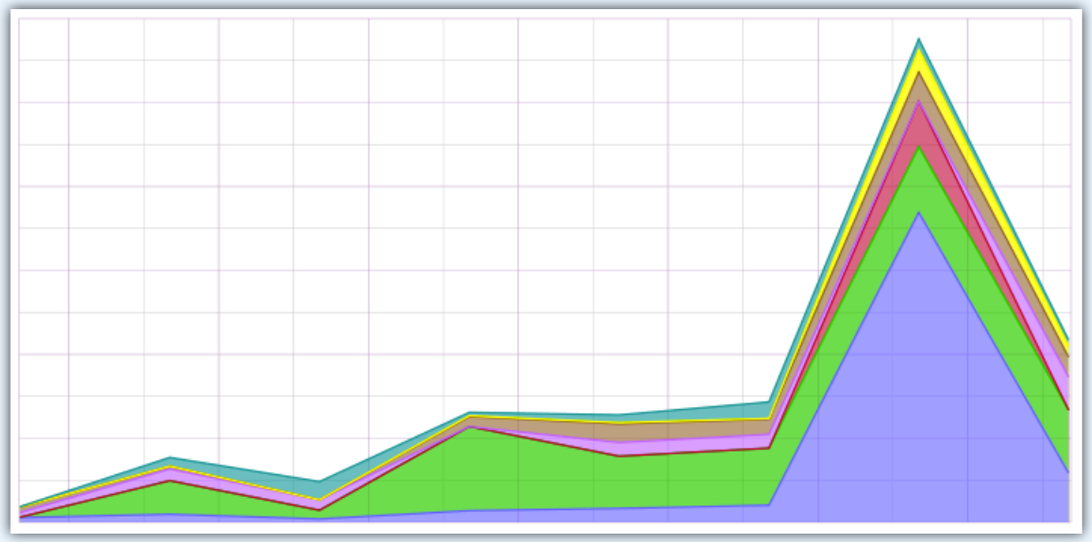
SHIP 31



SUCCESSFUL SSH PUSHES



REJECTED SSH CONNECTIONS



SUPPORT REQUESTS

GRAPH EVERYTHING

CUSTOM DASHBOARDS

SHIP 31

DEPLOY

CHECK EXCEPTIONS

CHECK PERFORMANCE

MERGE INTO MASTER
(IF APPLICABLE)

CELEBRATE!

YOU DON'T NEED DISTRACTIONS

YOU DON'T NEED TO BE
IN THE SAME COUNTRY

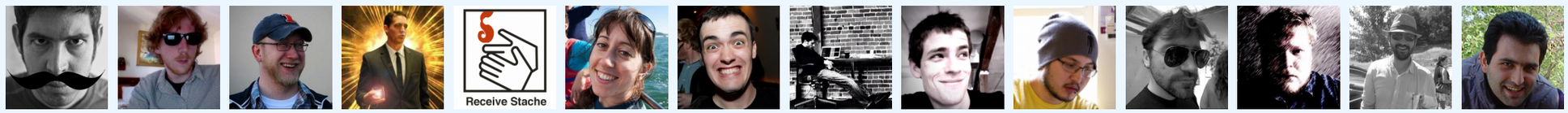
YOU REALLY DON'T
NEED A LOT OF
PROCESS

OPTIMIZE FOR HAPPINESS

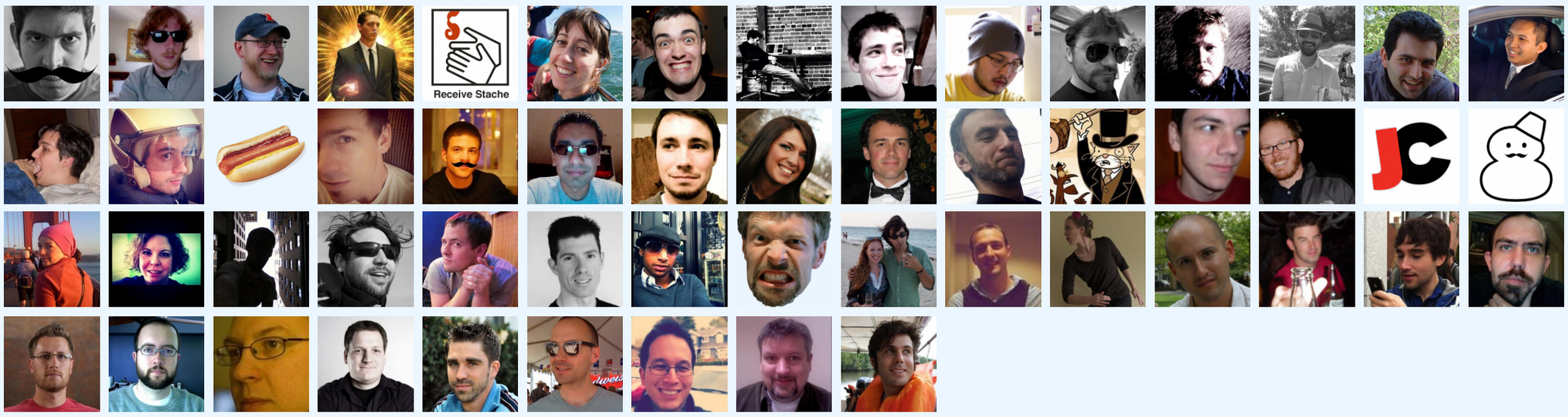
2008

2009

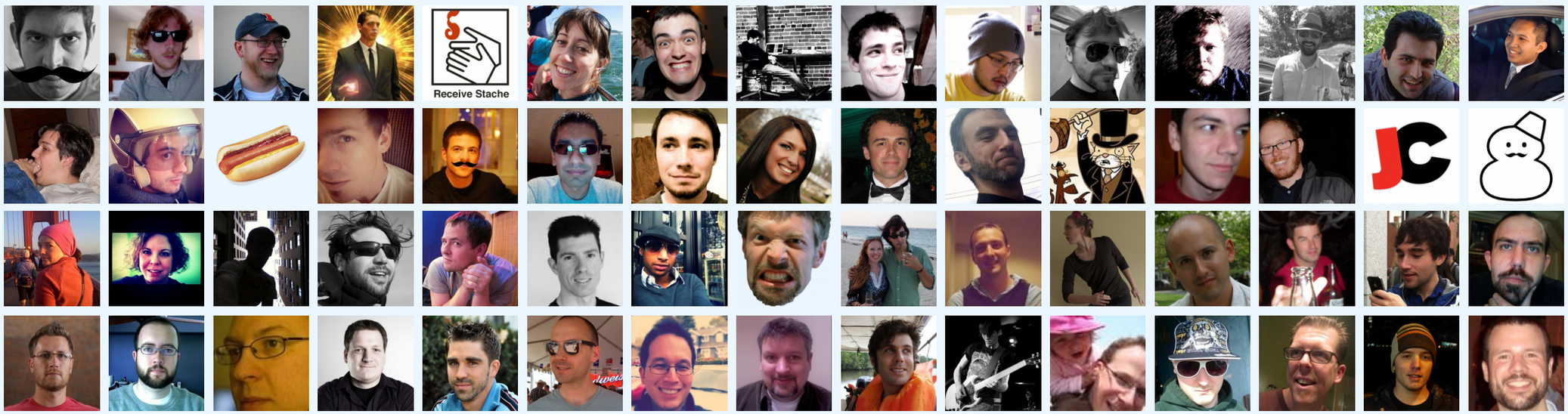
2010



2011



MARCH 2012



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EMPLOYEES

60

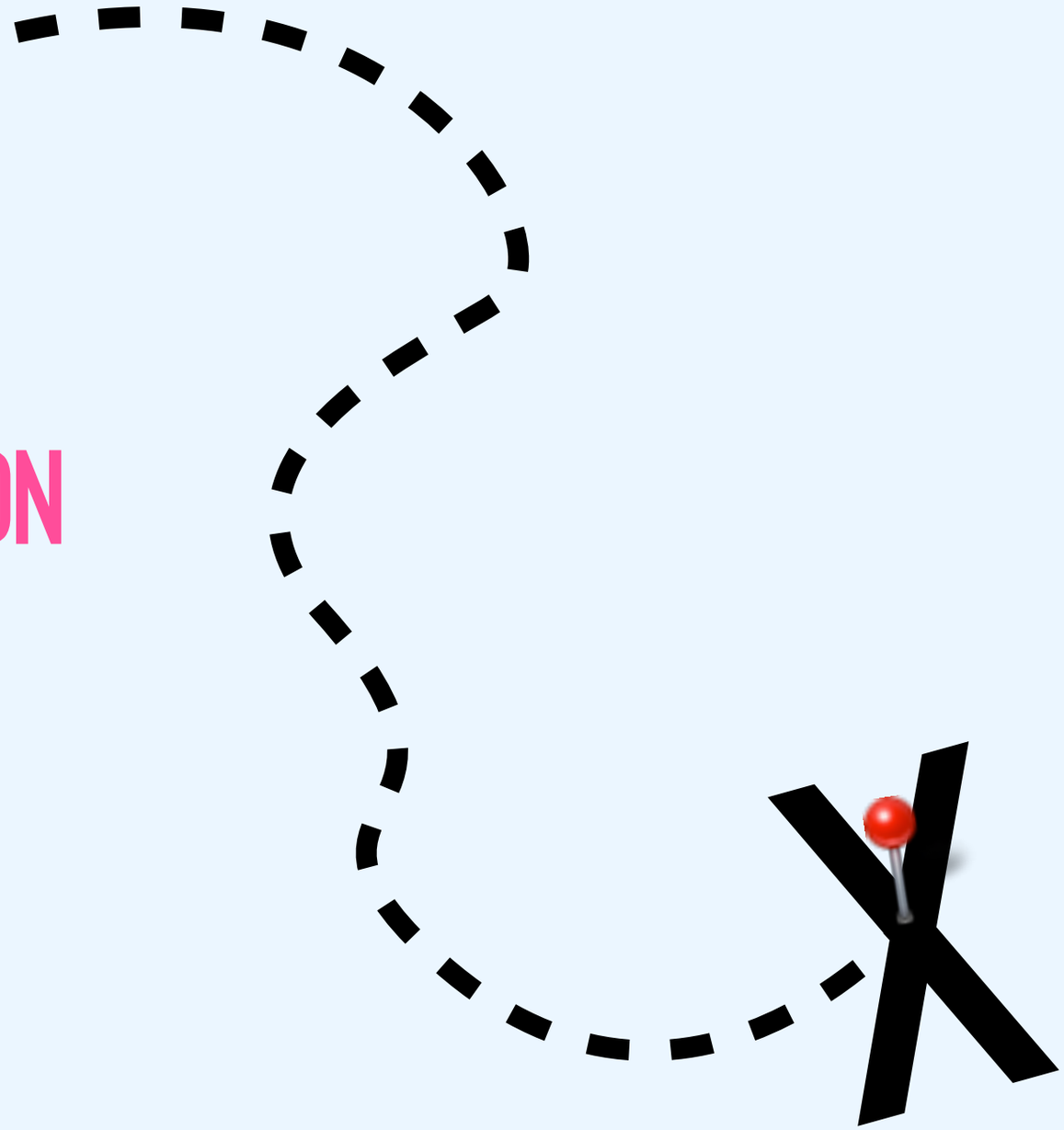
EMPLOYEES WHO HAVE LEFT

0

THIS REQUIRES
A HAPPINESS-ORIENTED WORKPLACE

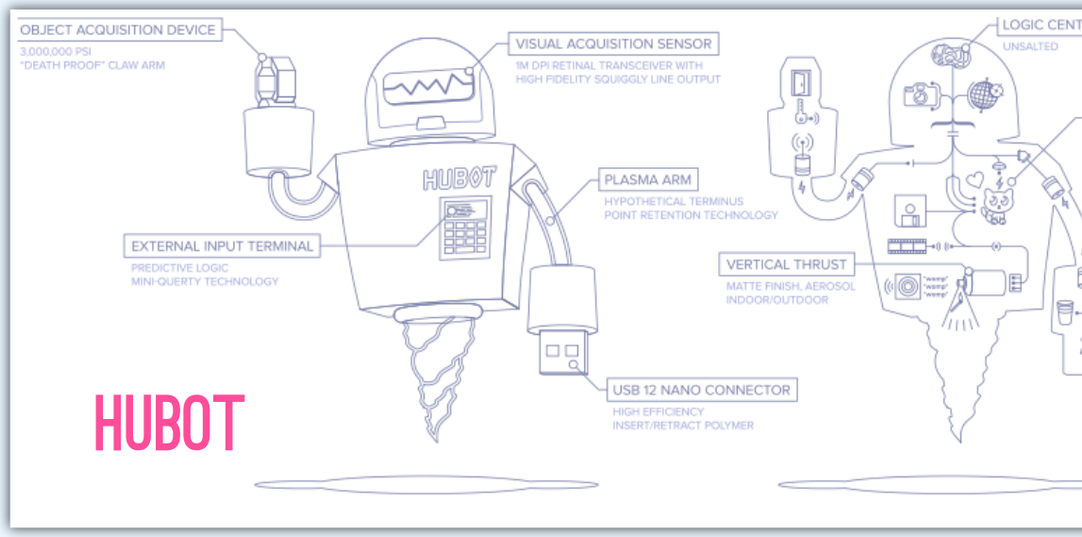
thinkific

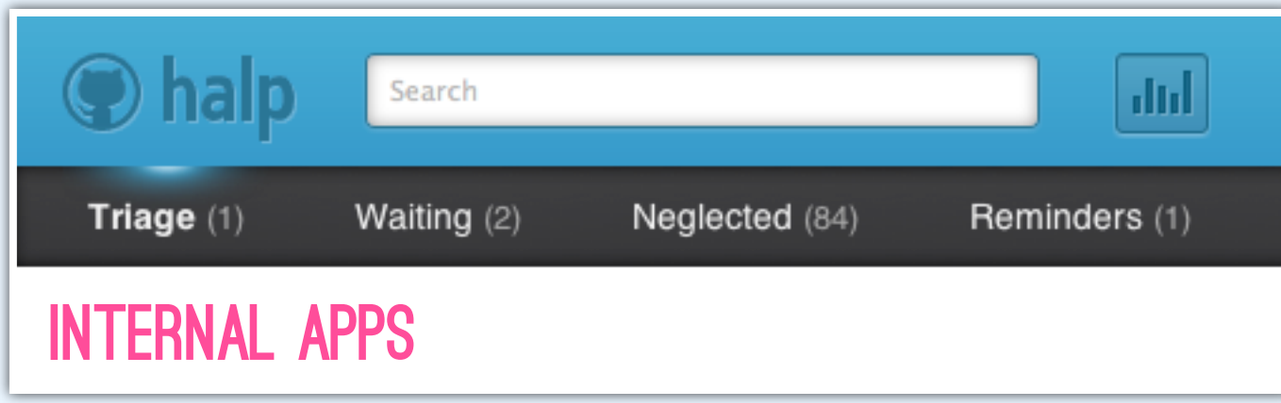
FOSTER EXPLORATION



FOSTER EXPLORATION

SHARED SIDE PROJECTS





INTERNAL APPS

FOSTER EXPLORATION

LEARNING

KINDLES&EBOOKS

ARDUINO LESSONS

SPANISH TUTORING

FOSTER EXPLORATION

AVOID BURNOUT BY ENCOURAGING NEW THINGS

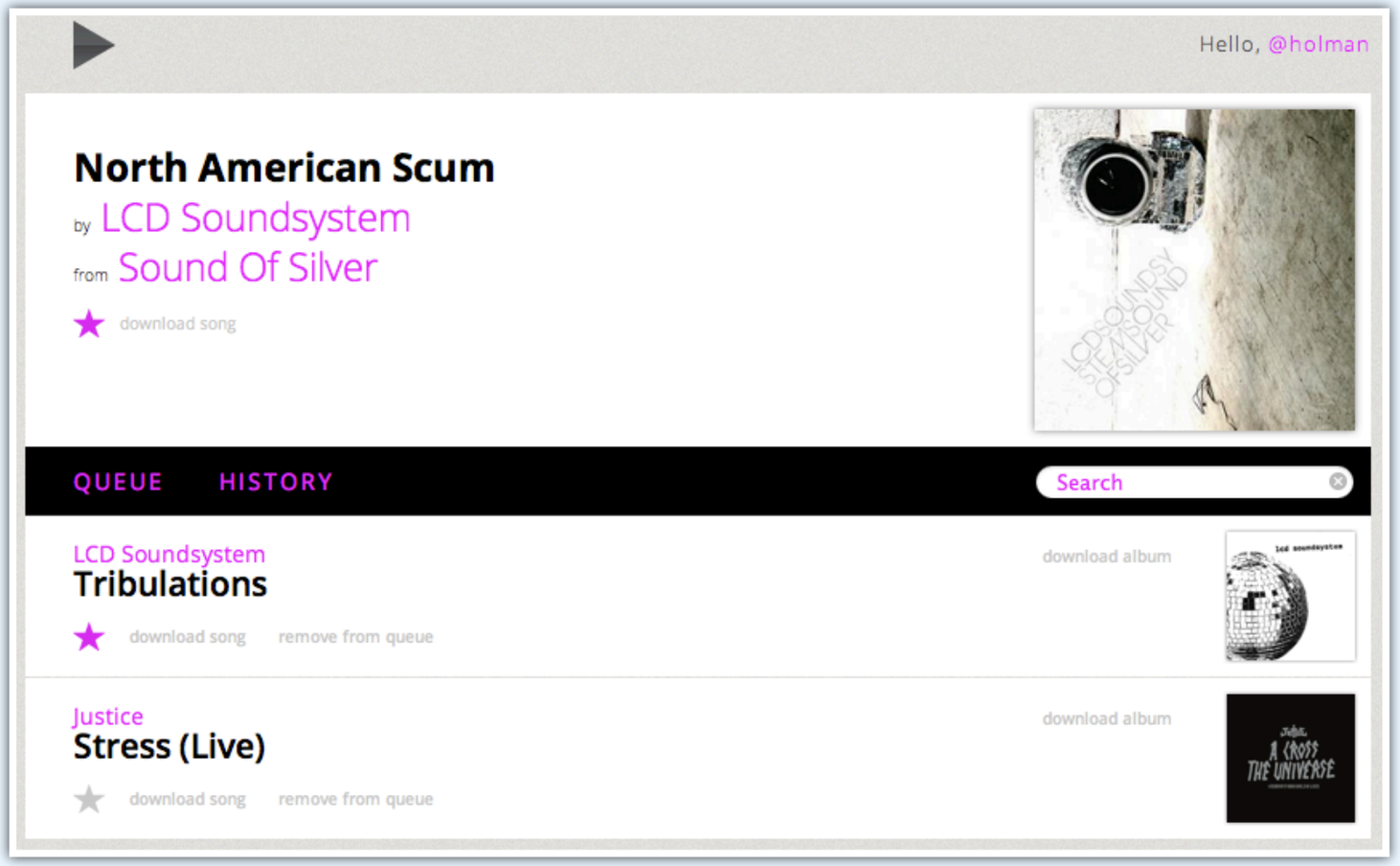
ENCOURAGE NETWORKING

CONFERENCES, MEETUPS

MEET PEOPLE

HIRING - LEARNING - MARKETING

HOLMAN/PLAY



MUSIC

SPEAKERS - LIVESTREAM - SHARED CULTURE

BRING EVERYONE TOGETHER ON FRESH & NEW AS OFTEN AS POSSIBLE

BE FLEXIBLE

BUILD A COMPANY
YOU WANT TO WORK FOR

PUSH FOR HAPPINESS

THANKS.

ZACH**HOLMAN**

ZACHHOLMAN.COM/TALKS @HOLMAN