

# Developer!

## Developer Developer

---

### UK Community Events



sketchnotes from

# DDD North 2015

October 24, 2015

## - INTRO -

Sketchnoting is a visual way of storing ideas, which boosts concentration and memory ... it's great fun too!

Here is a series of sketchnotes which we have gathered from the DDDNorth Conference 2015. Many of these were taken by people who had little or no experience of sketchnoting prior to the conference.

We hope we can inspire you to try out sketchnoting for yourself!

sketchnotes by

Bill Beckett @billybeckett

Matthew Edmondson @eddy556

Matt Ferron @Matt\_Ferron

Derek Graham @deejaygraham

Steven Hill @MrStevenHill

Ian Oxley @ianoxley

Ste Prescott @ste\_prescott

Naeem Sarfraz @naeemsarfraz

Luke Stringer @lukestringer90

Lai Tang @LaiTang

Chi Goc Voong @mecodepanda

Kate Walker @driveoutwith

# Sketchnoting for Developers

Derek Graham  
`@deejaygraham`

Sketchnoting: Derek Graham

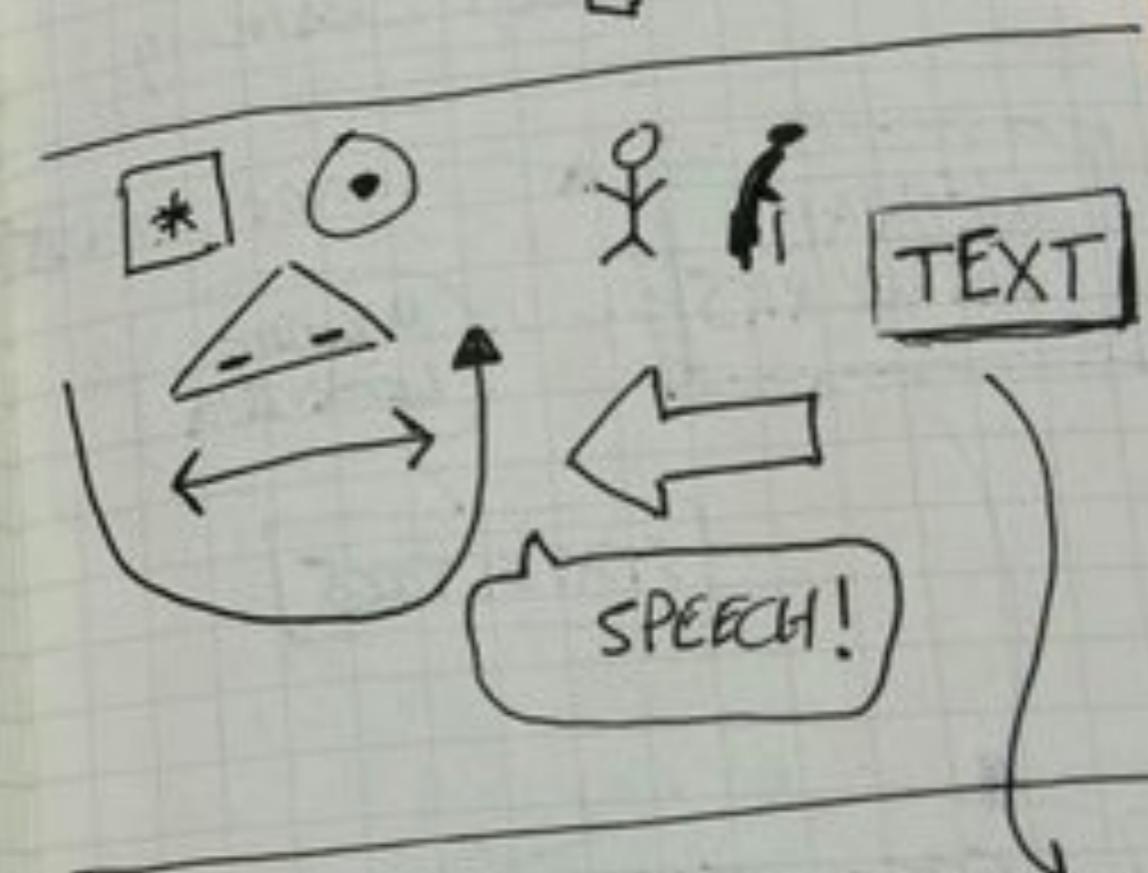
**BEST** IDEA  
ARTIST



DUAL CODING  
THEORY      SCIENCE

PSE

\* Jeannet King - What you Draw is Good Enough



- Sketchnote Army
- New project
- Embrace mistakes

Sam Wes

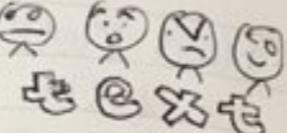
@ianoxley

DDD North 2015

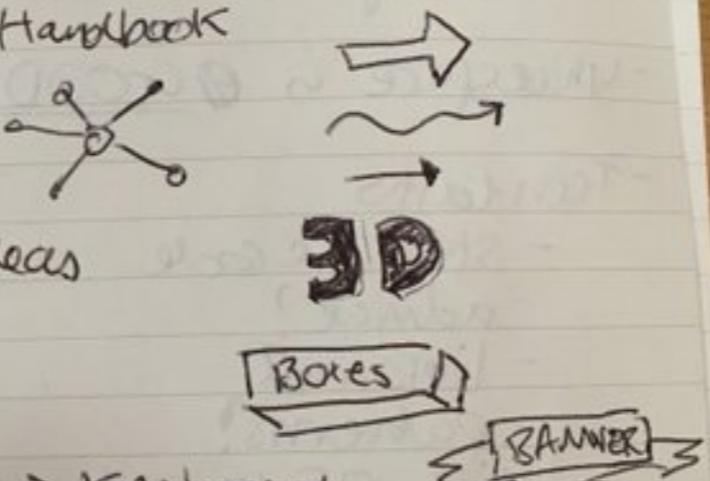
Quote

Thought

## Sketchnoting for Developers



- Agile involves diagrams, but we went to make them formal/professional
- This is a mistake
- Atlassian put everything on a team wall to get everyone involved
- "The winner is the best idea, not the best artist"
- Sketchnoting is easy to get into visual communication.
- The Sketchnote Handbook
- Why?
  - Memorable
  - Big picture
  - Conceptual ideas
  - Integration
  - Recall
- Science
  - Handwriting > Keyboard
  - Visuals > text
  - Overall frameworks and specifics
- Text notes are best for the speaker
- Visual notes are best for listeners
- Deliberate attempt to slow down and think about connections and your own representation
- It's about ideas not about art
- What you draw is good enough (book)
- Use pencil for layout / use graph paper



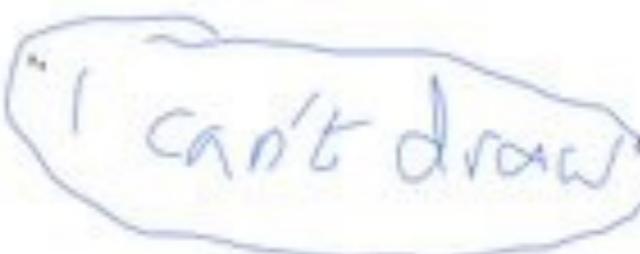
## DOO WORK

24 October 2015 09:54

## 1. SKETCHNOTING 24/10/15



LISTEN!



Its about Ideas  
Not art

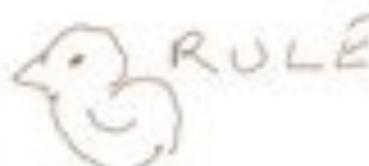
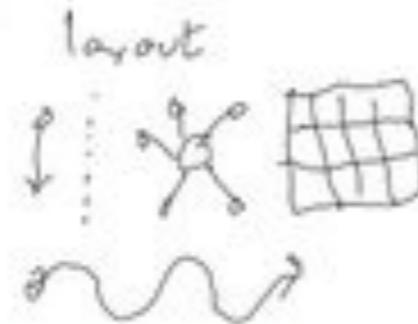
Text in Fonts  
OR COLOURS

**BOLD**



to fill in later

Light pen SECRET  
- PHOTOCOPY  
SHOW  
GRAPH PAPER



shun - filin



- ↗ SKETCHNOTE ARMS



## SKETCHNOTING

DERET GRAHAM

- INFORMATION LITERATORS
- WHEN WE ARE KIDS WE DRAW  
*(ALL CHILDREN ARE ARTISTS)* PICASSO
- VISUAL THINKING
- AGILE 2015  
LITTLE BOOK OF SKETCH NOTES - EBOOK  
USED BY ATLASIAN - ON WALLS

"THE WINNER IS THE BEST IDEA, NOT THE BEST ARTIST"

- NO 'CORRECT' WAY
- COMMUNICATION

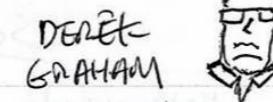
\* THE SKETCHNOTE HANDBOOK \*

- USE SYMBOLISM  = TEAM
- MINIMAL COLOURS TO HIGHLIGHT
- SINGLE PEN  X1
- INDIVIDUAL STYLE

- CAN USE A TABLET

- WTF?**
- MEMORABLE 
- BCG PICTURE
- CONCEPTUAL

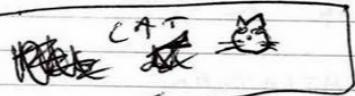
Look AT  
PEOPLES  
NOTES  
EXAMPLES  
ONLINE



## SCIENCE

HANDWRITING > KEYBOARD  
VISUAL > TEXT

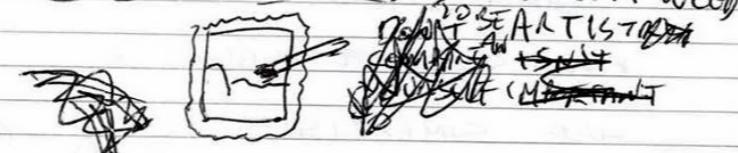
Dual coding  PAIR theory  
IN PROCEDURAL



MULTIPLE  
DRAWING  
AIDS MEMORY

REASONS NOT

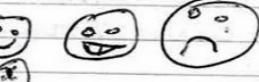
- IMMEDIATE RECALL
- TOTAL CLARITY NEEDS



IDEAS NOT ART

GRAPHIC FACILITATOR  
JEANNIEE KING

WHAT YOU DRAW IS  
GOOD ENOUGH

USE  
EMOTICONS 

SEAN WES

FONTS

YA YA YA

BANNERS

PENS  
PENS  
PENS

lower case

BLOCK

SUPER

Script

AYOUTS

PLAN

- TITLE
- SPEAKER
- TYPE OF TALK
- LAYOUT?
- PLAN

LISSTEN

TWITTER TEST  
TOP TEN POINTS  
PRIORITY  
CAN'T CAPTURE ALL

PLAY NOTES  
TO PERSONAL  
LEARNING STYLE

SKETCH NOTE ARMY

- NOUN PROJECT
- EMBRACE MY STAKES
- SKETCH NOTE WORKBOOK

SHARE  
NOTES

- #
- TWEET
- #DIDNORTH

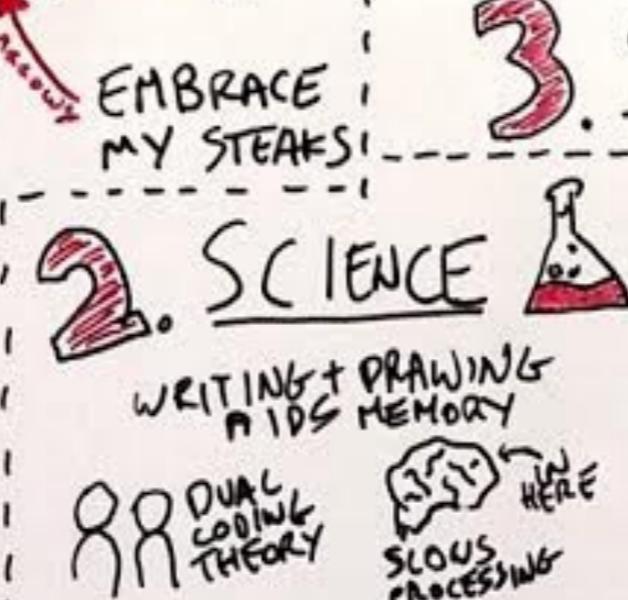
# SKETCHNOTING

BY MRSTEVENHILL



PLAN IN ADVANCE OR FREE STYLE

## 4. LAYOUT



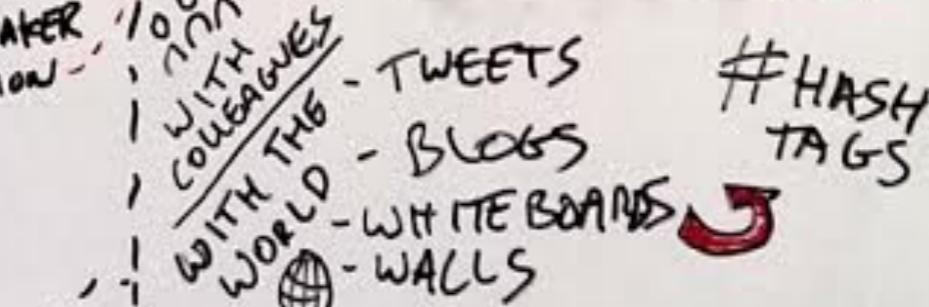
## 3. STYLES



## 5. LISTEN



## 6. SHARE



## 7. FURTHER READING

- SKETCHNOTE ARMY  
- NOUN PROJECT
- @ DEEJAYGRAHAM
- @ BOHDESIGN
- FINDING MARBLES
- SEANWES.COM
- JEANNELING.COM

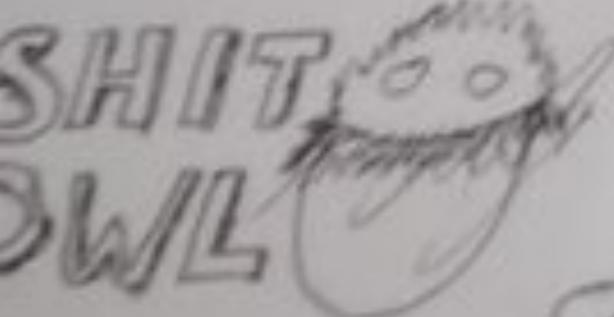
# Pad

Reword  
Sketchnote

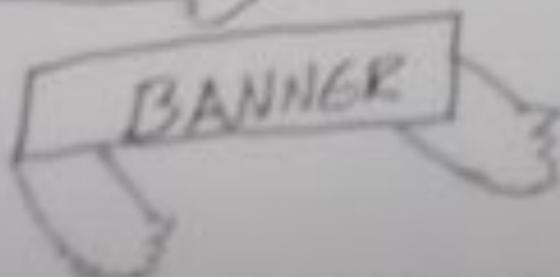
- Jason Fried  
Handbook - Mike Rohde

Sketchnoting

- Memorize  
Big Picture  
Drawings + Ideas  
Recall
- Handwriting best for  
memories



+ Pictures  
Quotes - It's a  
bubble



[www.sketchnotearmy.com](http://sketchnotearmy.com)

ZPROM  
BY G

# emo id

TALK TITLE

STOP SKETCHING  
AND REWIND

Write first few  
words for list

If something  
more important  
crops up

SKETCHNOTE  
[HTTP://ARMY](http://ARMY)  
#usehashtags

SKETCH  
NOTE  
WORK  
CAMP  
PAGE  
55

Page 35

ROM

[www.sketchnotearmy.com](http://sketchnotearmy.com)

@eddy556

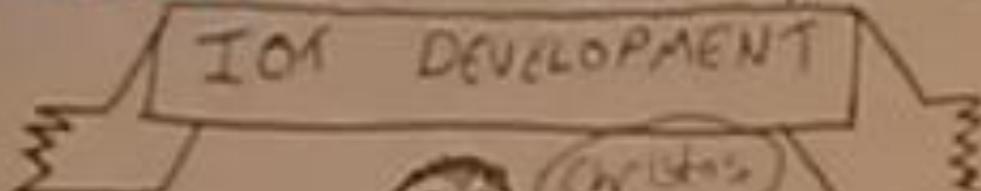
# IoT Development Fun with .NET and Raspberry PI

Christos Matskas  
@ChristosMatskas

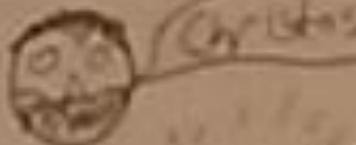


@Matt\_Ferron

# Memo Pad



IoT DEVELOPMENT



Chris

URT Beuren

WEFI

We worked  
on lots  
of projects



2020 - 4 BILL  
CONNECTED  
PEOPLE

IoT  
HAS  
HISTORY



EASY TO  
HACK



# Memo Pad

ZIGBEE PROTOCOL



X INSECURE X



WINDOW  
INT

Industry  
Mobile  
Core

C++  
C#  
SS  
VB.NET

Why do it?

GAZPROM  
WEBSITE  
SUBNET  
WIFI  
WINDON INT  
Approach

Report  
SCADA  
Protocol

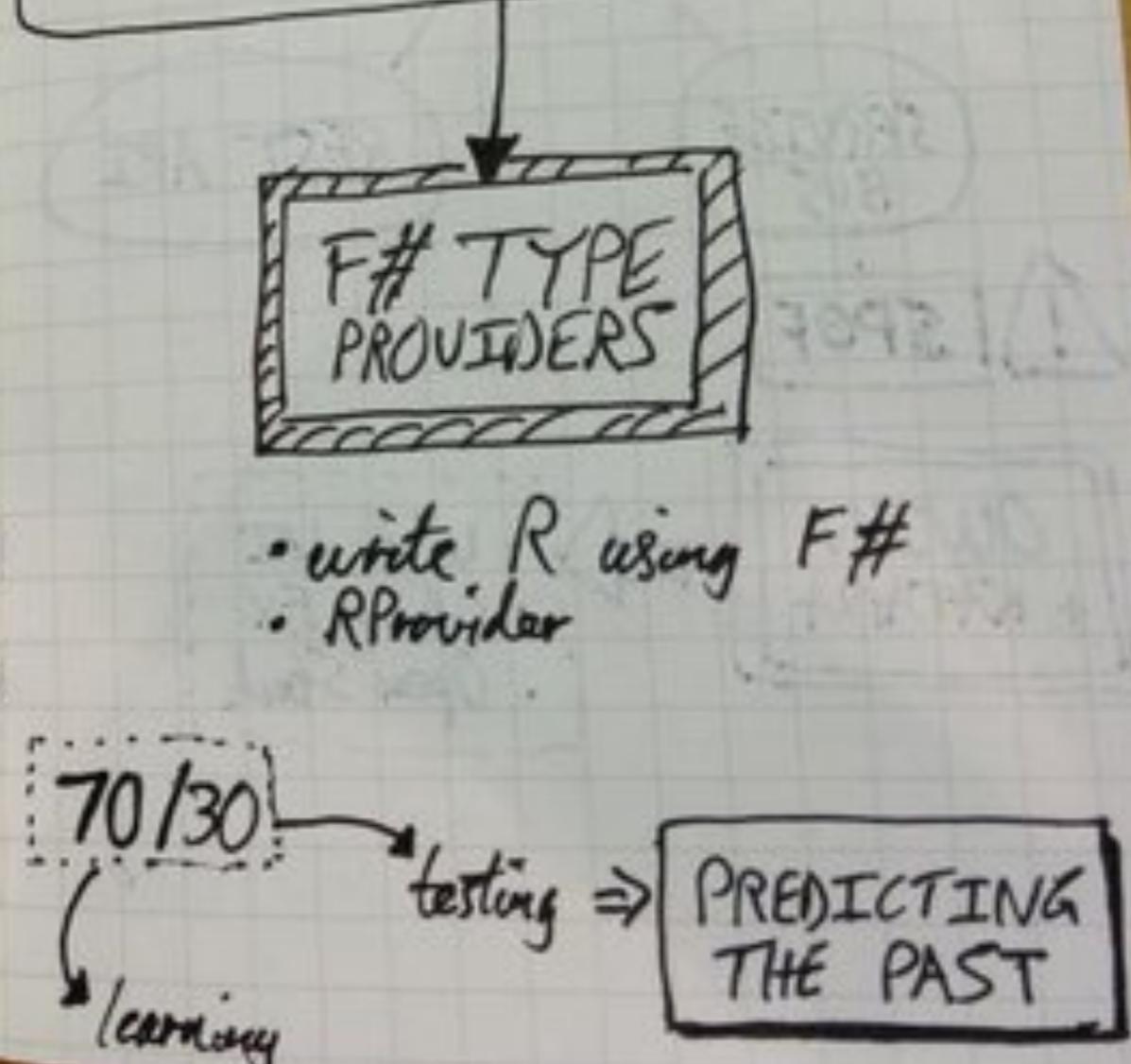
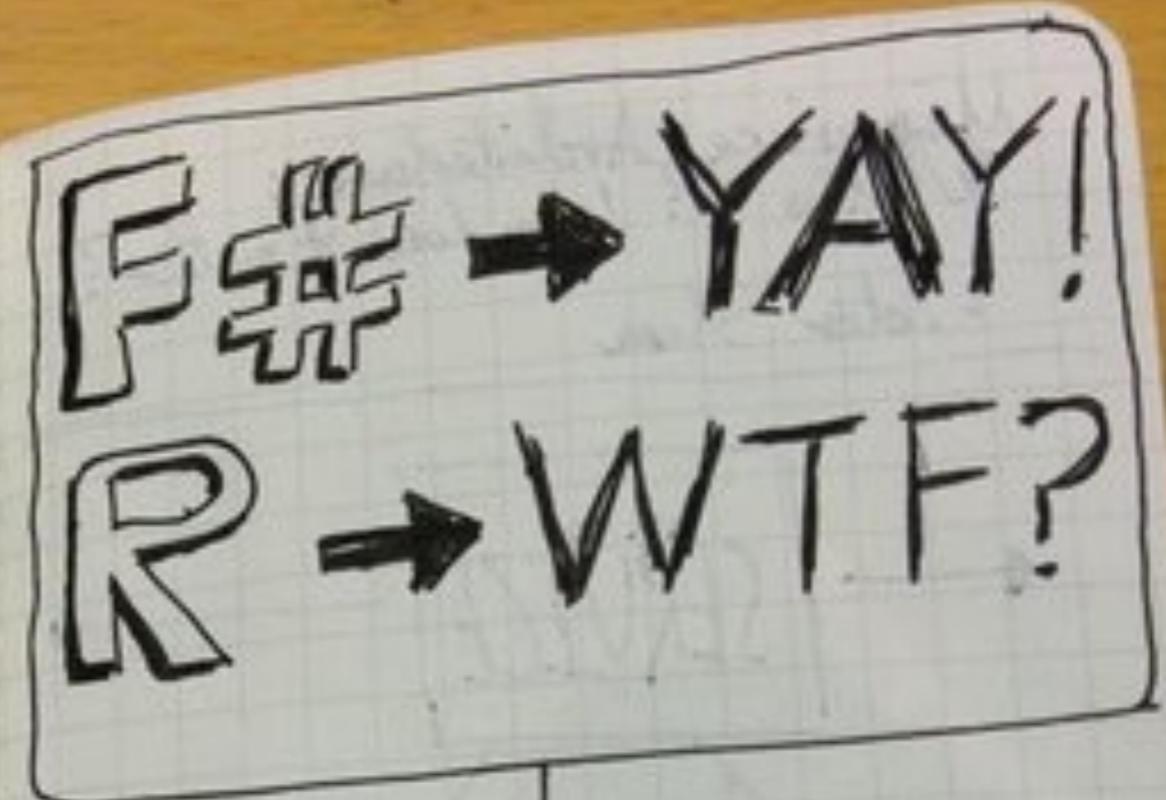
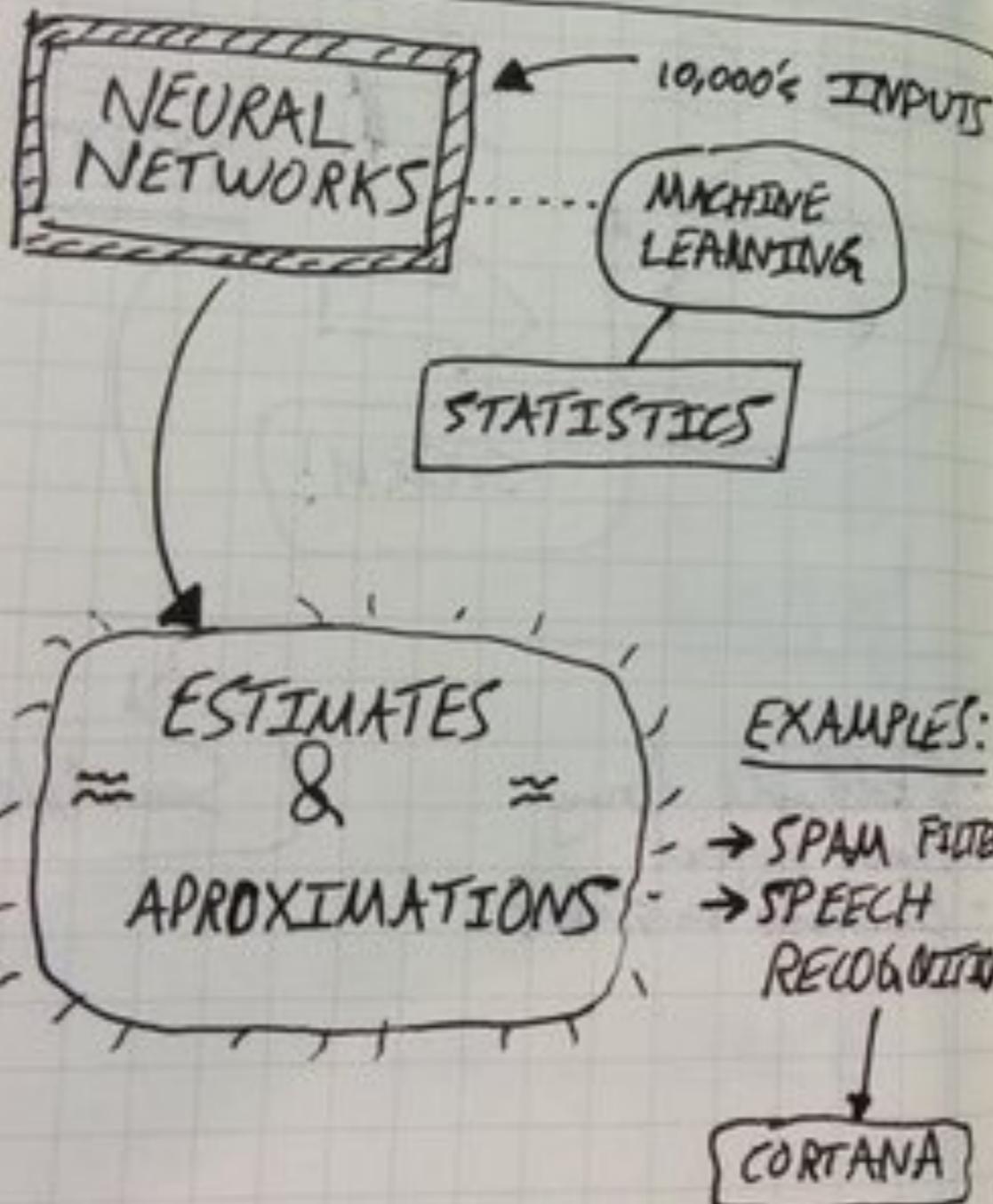
Control  
Protocol



# Deep Dive into Deep Learning

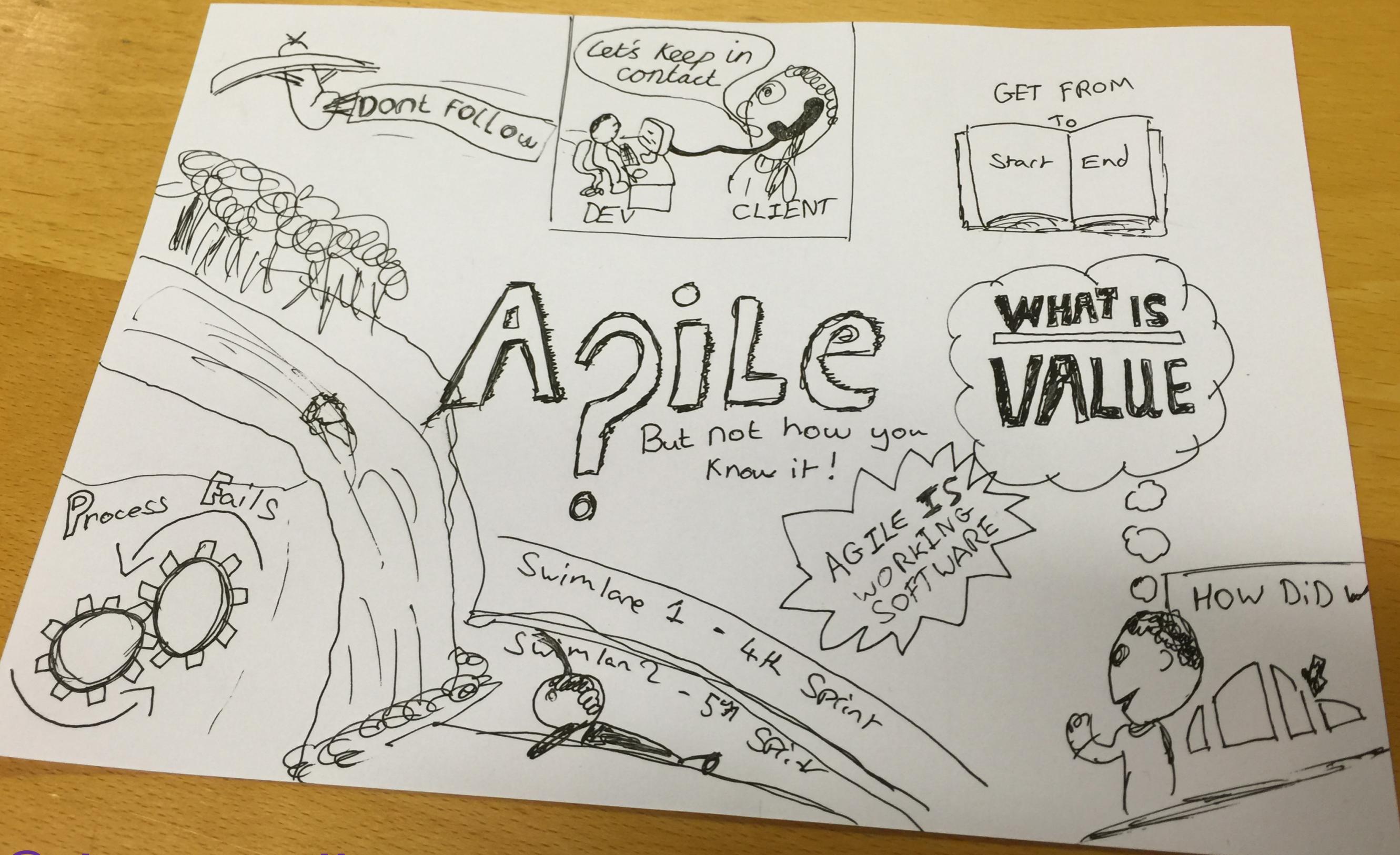
Gary Short  
@garyshort

## Gary Short: Deep Dive into Deep Learning



You keep using  
the word agile,  
I do not think it means  
what you think it means

Nathan Gloyn  
@ NathanGloyn

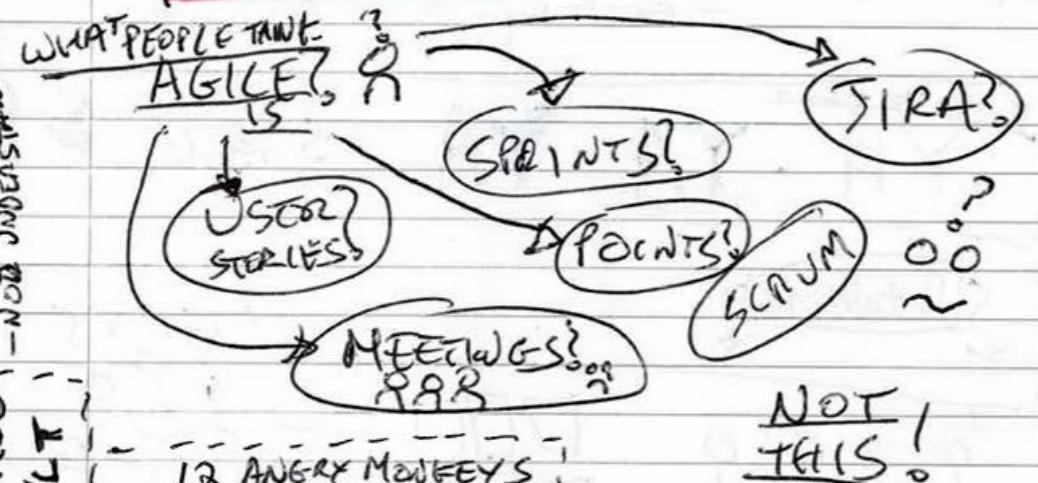


© NATHAN GOW



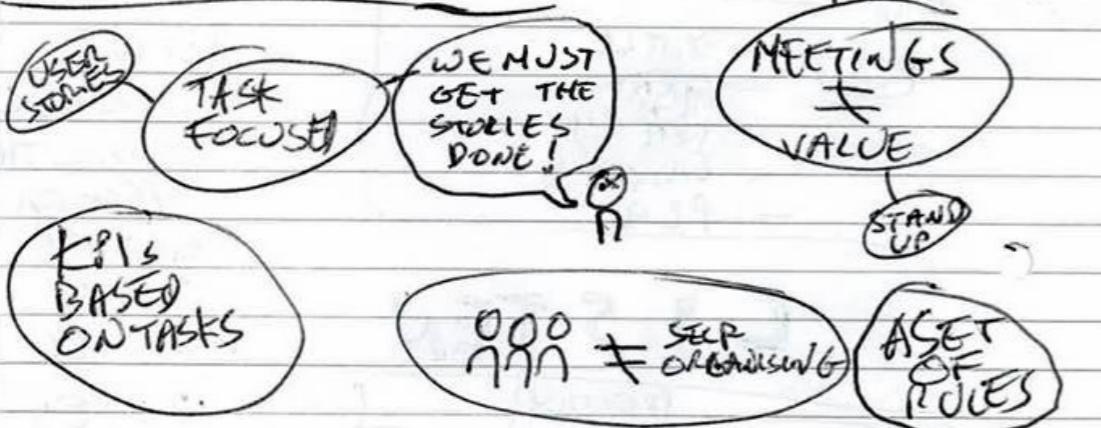
## YOU KEEP USING THE WORD AGILE...

MIMICKING &  
NOT UNDERSTANDING  
CARROT  
CULTURE

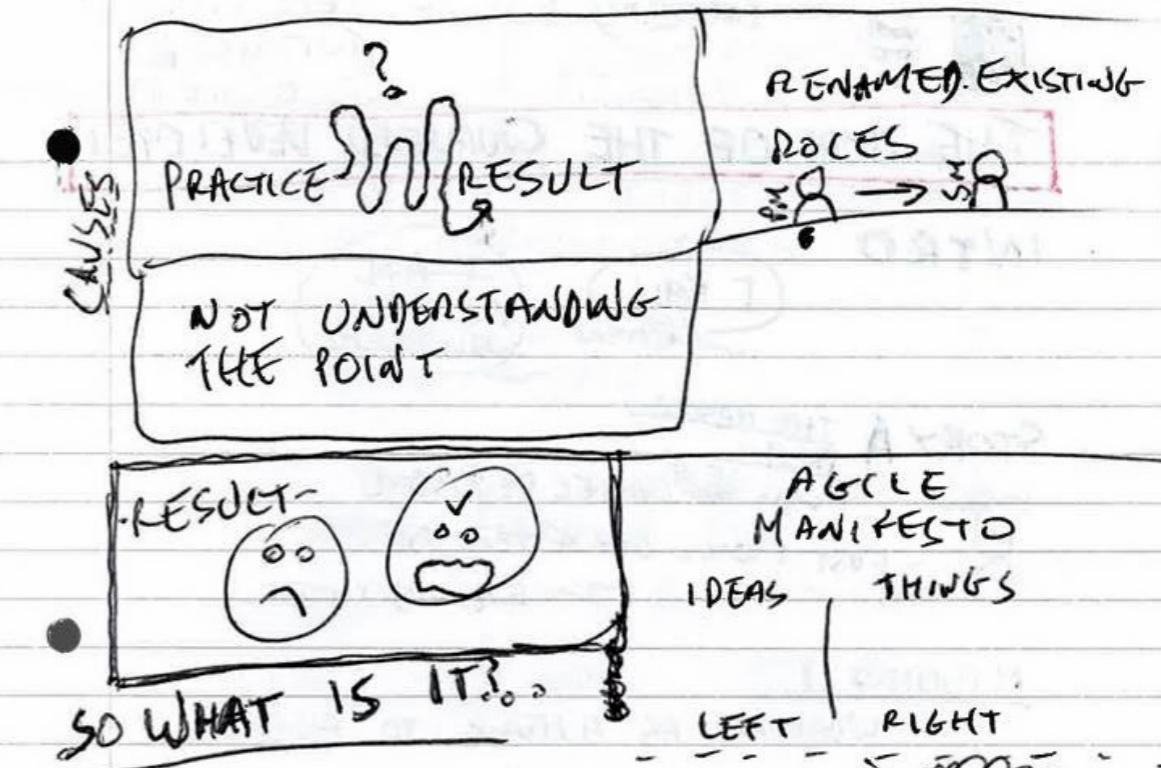
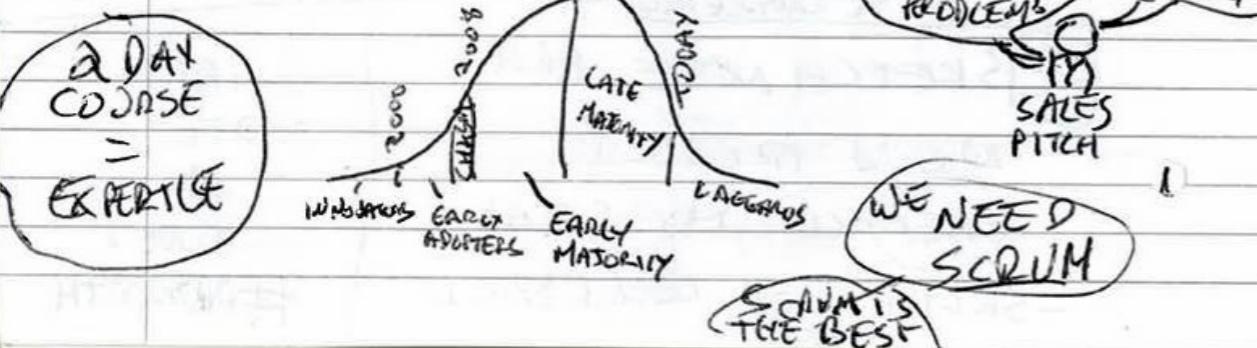


## WHAT IT ISN'T...

BACKLOG AT THE TOP

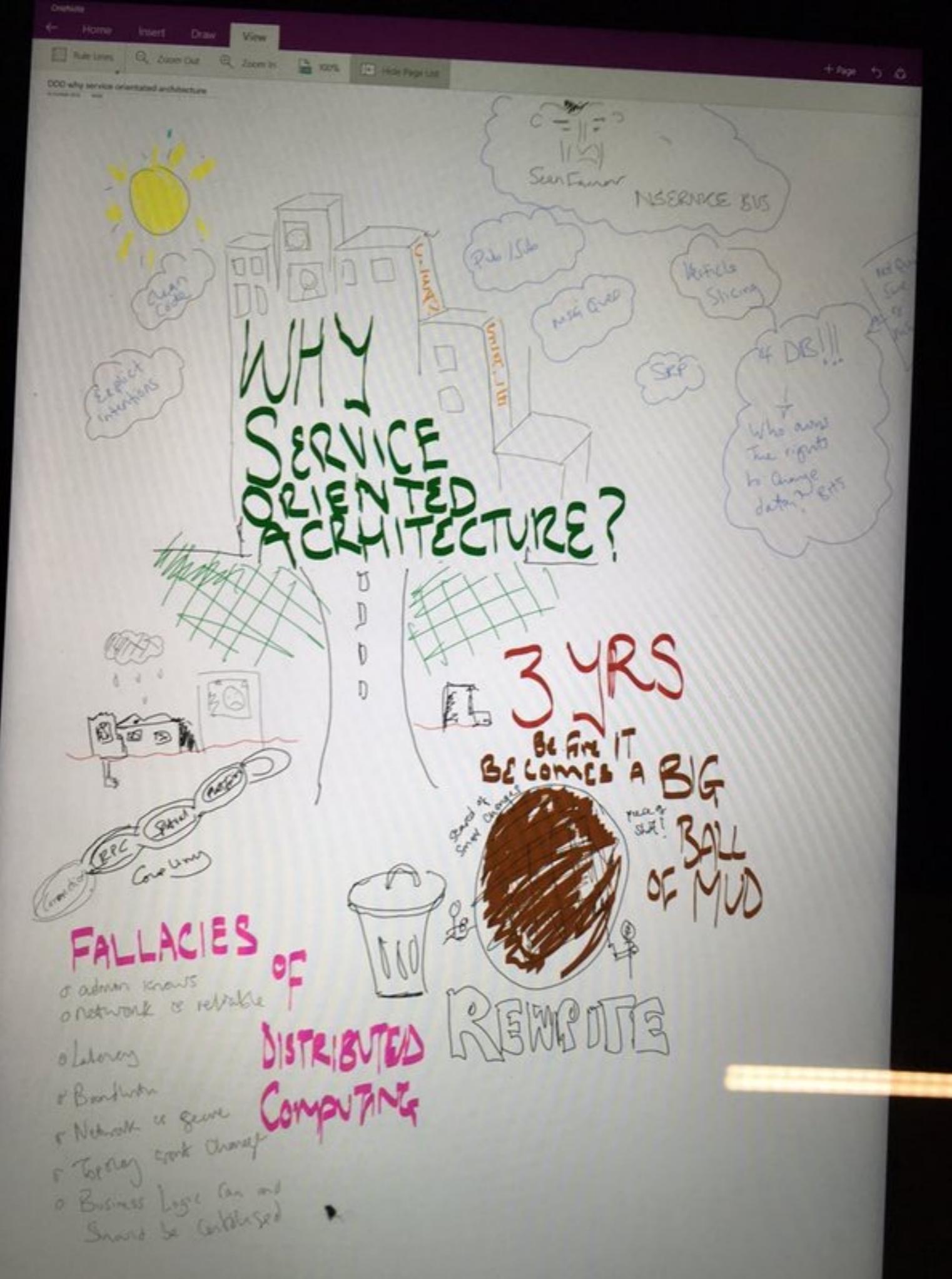


HOW/WHY?



# Why Service Oriented Architecture?

Sean Farmar  
@farmar



@laitang

# Why SOA?

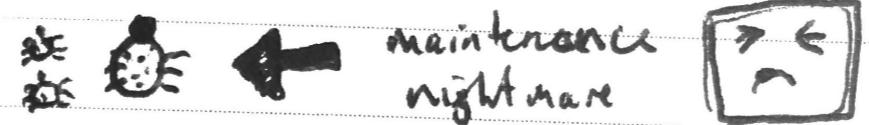


Sean Farmer

THE EVO R. →

@farmer

Small monolith → \$ success → features + + ↴

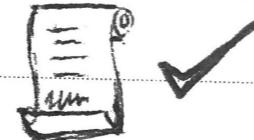


reduce

Coupling

No sharing

Only Contracts for communication



Coupling

Afferent Efferent



Coupling  
Impossible.

MINIMIZING  
IS KEY!!!

DEPENDENCIES

DEPENDS ON

Temporal

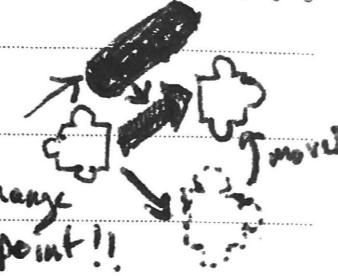
TIMING, RPC

- Async messaging
- Publish/Subscribe
- + Forget.

Spatial

DEPLOYMENT CHANGES

need to change endpoint!!

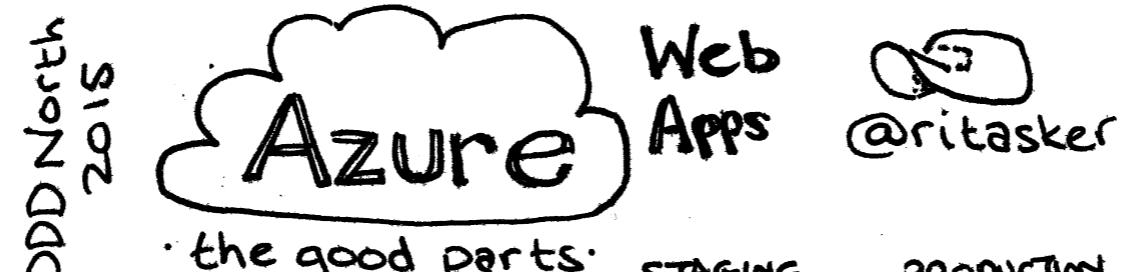


@mecodepanda

# Azure: the good parts

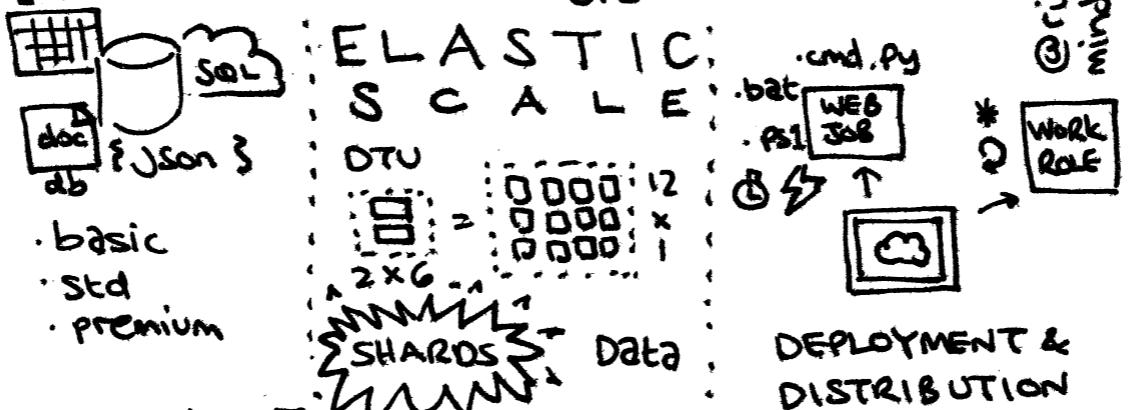
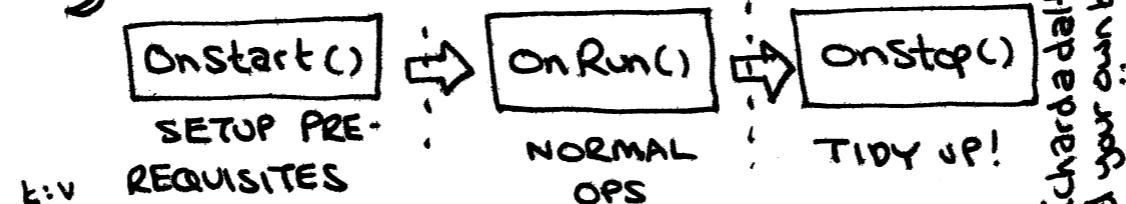
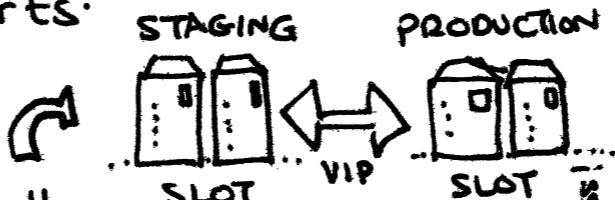
Richard Tasker

@ritasker



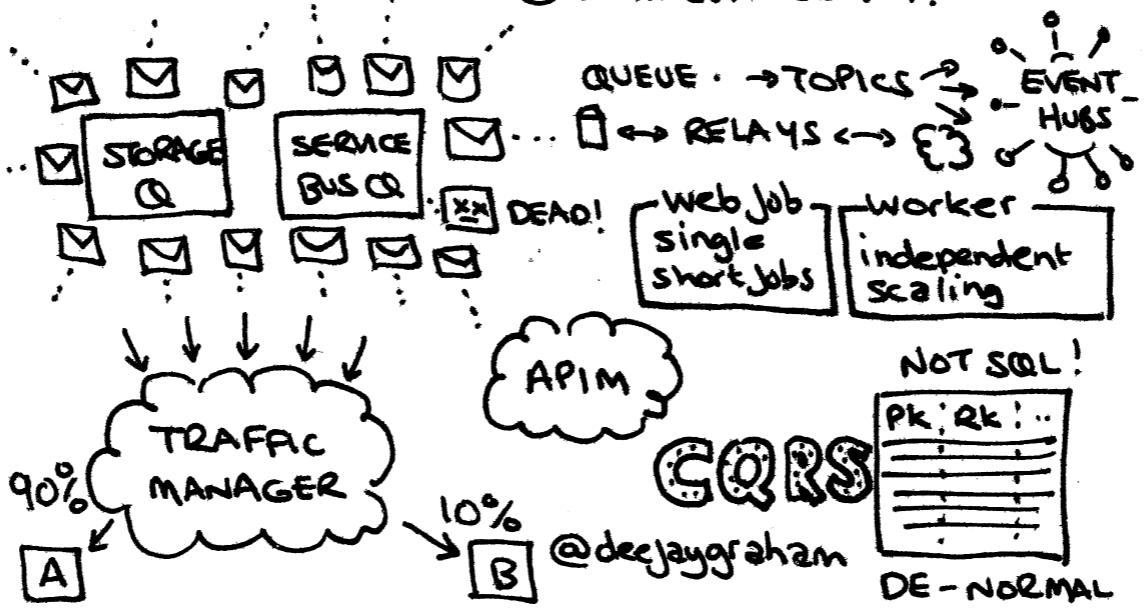
the good parts:

- deploy with
- or PowerShell



TROY HUNT  
"Have I been pwned"

ARTIFICIAL DELAY!



@deejaygraham

# Microservice Architectures

Peter Shaw  
@shawty\_ds

DDDNorth  
2015

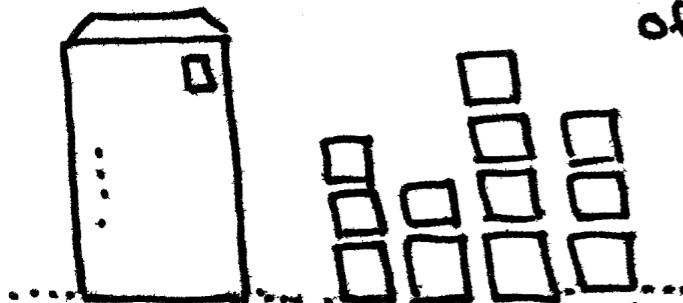
# Microservice Architectures

PETER SHAW

@shawty-ds



Architectural Design Pattern

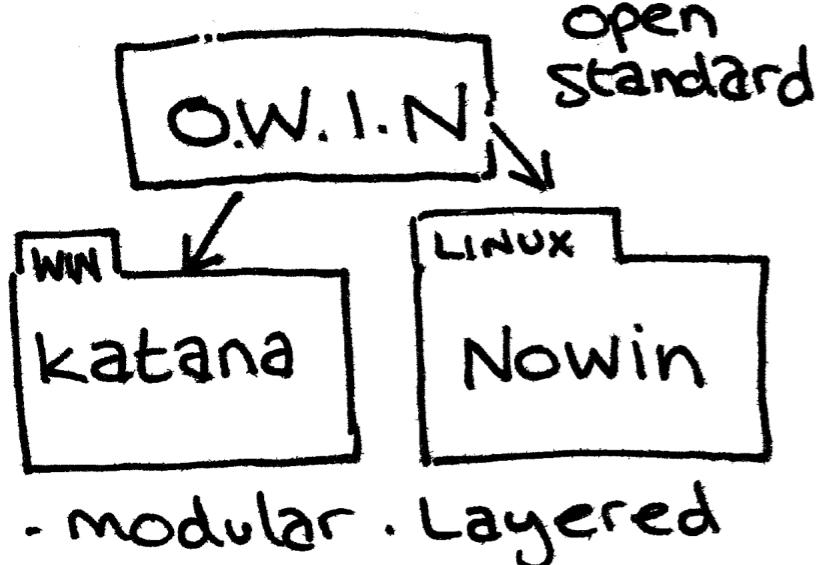


separation of concerns  
not platform specific

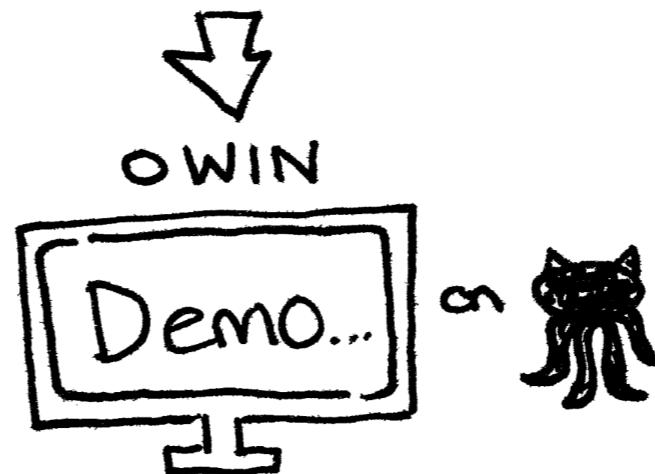
MONOLITH / 1 orders  
review customers recommend



\* Higher Maintenance cost \* Data Islands  
\* Monitoring: ALL THE THINGS!



## System.Web



NANCY  
FX  
@deejaygraham

@deejaygraham

# **Real world life with Git - a year later**

**Matteo Emili  
@MattVSTS**

## WHY?

- GEO DISTRIBUTED TEAM
- BRANCHING + HISTORY > TFSVC
- HISTORY RETAINED AFTER MERGING EASILY
- MATTEO LOVES IT



MATTEO

TFS  
↓  
GIT



POWERFUL @ THE COMMAND LINE OR POWERSHELL

USE RELEASE CODE NAMES

NOT SURE WHAT BENEFITS THERE ARE FOR MIGRATING FROM TFS VC FOR .NET

TAG YOUR RELEASE

|| GIT FLOW TO MANAGE RELEASES WOW (AND CONVENTIONS) MUCH

IT'S HARD TO GET COMMAND LINE SOURCE CONTROL



# Memo Pad

Notes

## LIFE WITH GIT

one year later

Manage log in AM  
Deployment

Need to be  
own master



Multiple workflow

✓ All

X cons

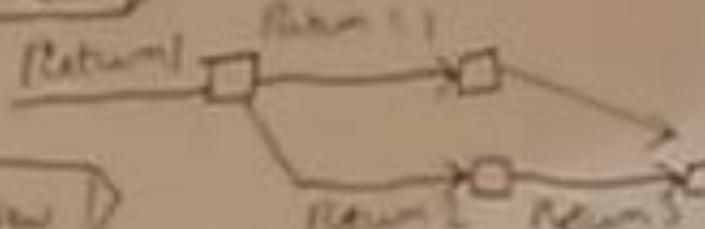
git & Posh

History: ✓ log > chronological  
log

# Memo Pad

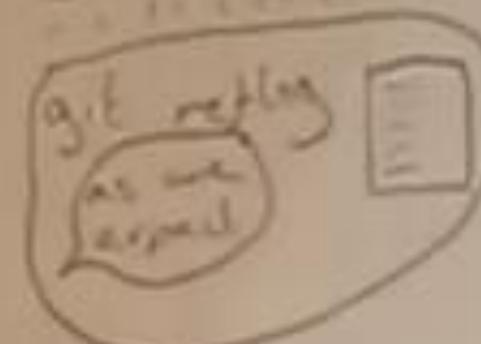
History view

Master



New

Source Tree



git log  
--pretty

git branch  
--contains

GAZPROM  
Gazprombank

History  
not chronological

Git log

Lots of  
switches

Use powershell  
as much as T  
can

git push  
- one line  
git pull  
- one line

git pull  
- one line

@eddy556

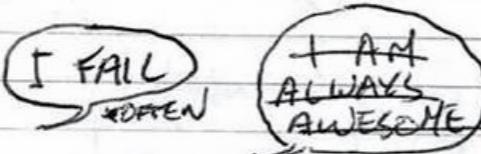
# The myth of the qualified developer

Pete Smith  
@roysvork

Pete@beyondcode.com Pete Smith  
@roysuo  
www.equalexperts.com

## THE MYTH OF THE QUALIFIED DEVELOPER

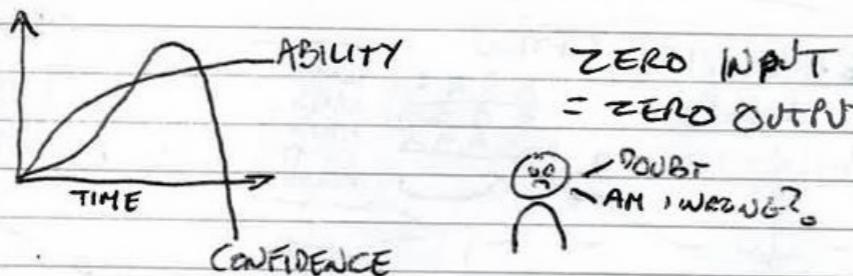
### INTRO



**STORY A** THE MASTER PLAN  
Student - I WILL BE A GAMES DEVELOPER  
- FIRST I WILL GET A TEMP JOB  
IN 5 YEARS LATER

### MISTAKE 1

- WORKING AS A MEANS TO AN END



'YOU WILL EVENTUALLY FIGURE OUT THE RIGHT PATH ONCE YOU START WALKING IN A DEFINITE DIRECTION'

### MISTAKE 2

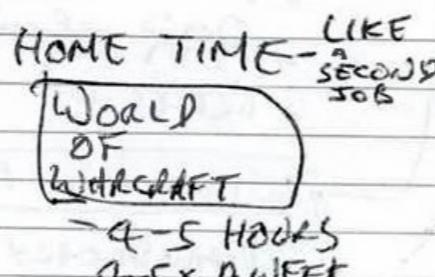
- COASTING

Person icon: GOT A NEW JOB - YEAH!  
- HIGH EXPECTATIONS

Job VS Warcraft

← SIMILAR →

IDEA - LEARN BACKUPS



YOU ARE THE ONLY PERSON IN CONTROL OF YOUR OWN DESTINY

### MISTAKE 3

DISGRUNTLED &

YAY! AGAINST OTHERS

FRANK - I CAN DO CODE

ERM? NO

### MISTAKE

DON'T DO THINGS BECAUSE EVERYONE ELSE IS  
"WE HAVE ALWAYS DONE IT THIS WAY"

LISTEN PLEASE - NO

NEED TO HAVE MORE AUTHORITY?

### MISTAKE

CRITICISING CODE CAN ALSO INSULT THE COMPANY / DEVELOPER

IF YOU ARE RIGHT DON'T BE A DICK

DON'T ASSUME OTHERS ARE - LEARNING LIKE YOU IS HARD

WHY IS THE TEAM GETTING WORSE? - WHY WON'T MANAGEMENT LISTEN

SIEGE RESPONSIBILITY - OUT ZOGO - WHAT NOW LEAVE b  
DE A CONTRACTOR

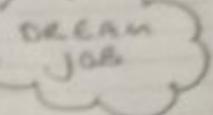
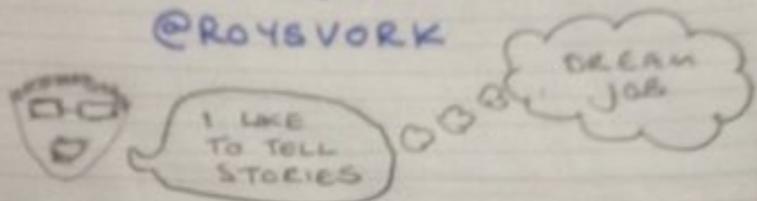
### MISTAKE

- NOT EXPECTING TO FAIL
- WE FAIL WHEN WE LEAST EXPECT IT
- DON'T WAIT FOR OTHERS TO FIX YOUR PROBLEM

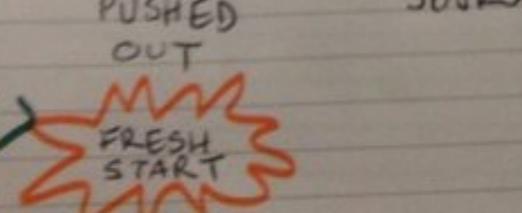
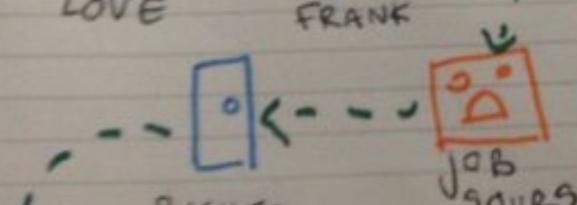
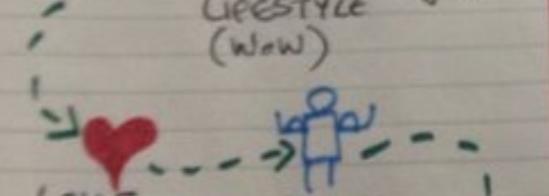
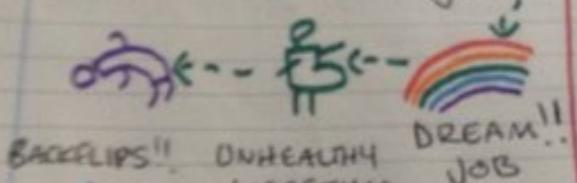
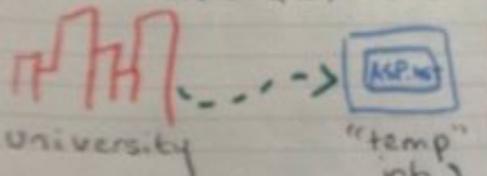
# THE MYTH OF THE

Qualified Developer

PETE SMITH  
@ROYSWORK



INTRIGUE, ADVENTURE AND MYSOGINY!



**MISTAKE 1:**  
zero effort, zero return

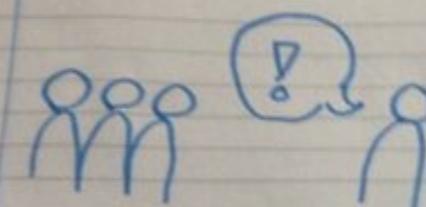
**MISTAKE 2:**  
ability failing staying  
in "temp" job too long  
confidence failing

**MISTAKE 3:**  
coasting

**MISTAKE 4:**  
comparing to other people

**MISTAKE 5:**  
perpetuating the status  
quo.

**MISTAKE 6:**  
ignoring the personal



\*contracting  
\*took past  
advice on board

**MISTAKE 10:** assuming you have  
finished learning

**FAILURE IS  
CONSTRUCTIVE**

# Monoliths to Microservices A Journey

Sam Elamin  
@samelamin

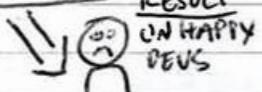
NEED TO  
GET BETTER  
AT PORTFOLIOS

SAM ECAMIN  
@SAMECAMIN

## MONOLITHS → MICROSERVICES

### FAIL FAST

WHY DO MONOLITHS  
GET BUILT?



GROWING  
FEATURES

- ONE DB
- UNKNOWN IMPACT
- LONG + COMPLEX PROJECTS

### MICROSERVICES

PUB - SUB

PUBLISHER

MESSAGE

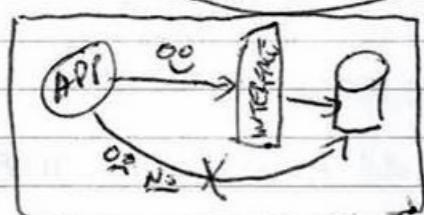
TOPIC

DOMAIN  
DRIVEN  
DESIGN

ERIC EVANS

SUBSCRIBER

SUBSCRIBER

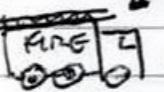


RACE HAZARDS!

- THINGS HAPPENING IN WRONG ORDER
- IMPACT ON CUSTOMERS

LOGICAL GATES

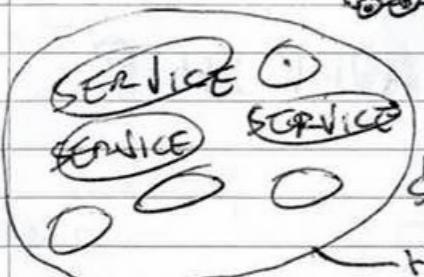
UNCLEAR  
BOUNDARIES



= STRICT  
CODE  
REVIEWS

TESTING IS  
HARD!

DEPLOYMENT NEEDS  
TO BE CONSISTENT!



COMPLEXITY  
IN NUMBER

TOO  
MANY  
SERVICES?

COMPLEX  
INTERACTIONS

HEALTH

HOW TO  
MONITOR

= STATE  
= SELF MONITORING  
- SERVICES CAN TACK

! REDUCED CODE COMPLEXITY  
INCREASED INTERACTION COMPLEXITY !

GET THE BUSINESS INVOLVED  
- DON'T DICTATE THE SOLUTION  
- KEEP THEM UNDERSTANDING

## ! DATA DUPLICATION

PREFER  
DUPLICATED  
DATA THAN  
SYSTEMS?

ORCHESTRATION LAYER

- CONTROL ORDER OF EVENTS
- MANAGE DEPENDENCIES

FAILURE HANDLING

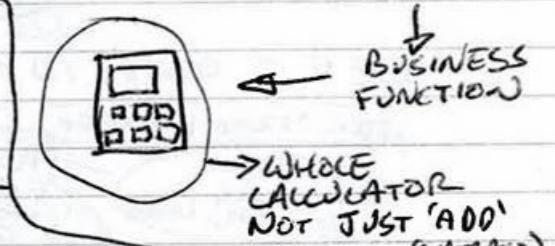
CODE OWNERSHIP  
→ STATS  
→ MONITORING  
→ ORDER NUMBERS

BUSINESS  
CONFIDENCE  
IN DEVELOPERS ↑

DOCKER  
VNEXT

TRY WRITING NEXT FEATURE AS A SERVICE

AUTOMATED DELIVERY  
IS A REQUIREMENT  
- DEPLOY 1+ SERVICES  
AT ONCE



BUSINESS  
FUNCTION

WHOLE  
CALCULATOR  
NOT JUST 'ADD'  
'SUBTRACT'

# MONDULUS TO MICROSERVICES

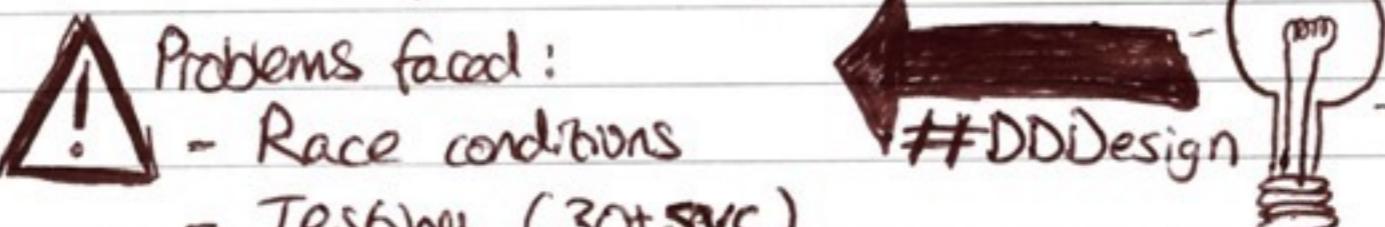
@Samuelamin

DDD 2015

MUD + COMPLEX

Business Not Buying

Back to drawing board



#GetInvolved in VISION meetings

MONITORING

- effect of your change
- Stats driven by AT

Does our PLATFORM support the vision?

@naeemsarfraz

# Getting Started with Continuous Delivery

Colin Mackay  
@ColinMackay

# Memo Pad

## CONTINUOUS DELIVERY

http://calnmackay.net

Software change  
Deployable

Not deployed every time to prod

CI solves DEV patterns

CD solves DEPLOY patterns

Manual Delivery

Test & Live

Manual  
Deployed Good  
Not many releases

GAZPROM  
Gazprom Energy

www.gazpromenergy.com

# Memo Pad

the

cont → Test → deploy Test → live Test  
→ Prod

Not ready → Prod

Usually fails  
until we get  
to live

JENKINS  
TEAM CI  
GO CD

@calnmackay

GAZPROM  
Energy

Continuous  
Delivery

365 hours

@eddy556

# Logging & Monitoring

## How to keep DevOps happy

Joel Hammond-Turner  
@ramesses



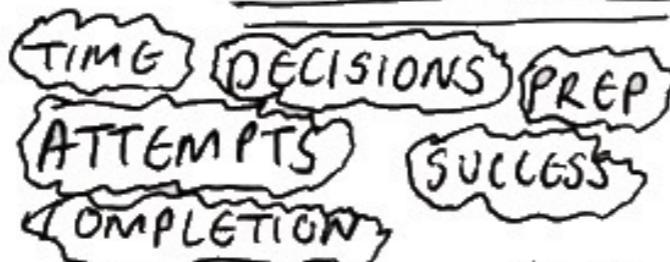
DO NOT IGNORE

## EXCEPTIONS!

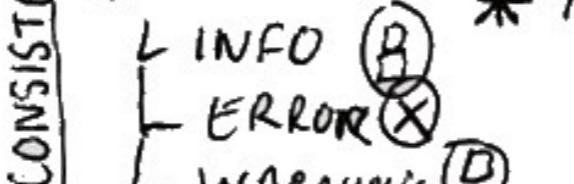
## LOGGING

LOG AS IF IT'S YOUR  
ONLY OPTION

## LOG CONTEXT



## LOG LEVELS



\* Raygun.io \* App Dynamics  
\* Metric.NET \* Serilog

IT'S ALL FUN + GAMES  
UNTIL YOUR CUSTOMER  
BLOCKS THE RAYGUN.IO  
DOMAIN!!

{ THIS HAS HAPPENED }  
{ TO US!!!! }

@Matt\_Ferron

# DDD NORTH 2012



LOGGING



MONITORING

Joel Hammond - Turner @rammases

A DEEP UNDERSTANDING OF

SOFTWARE

IN

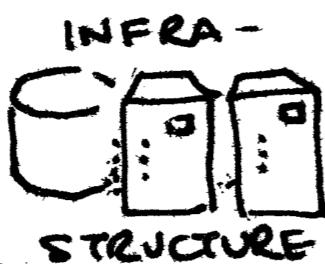
PRODUCTION

WRAP CALLS

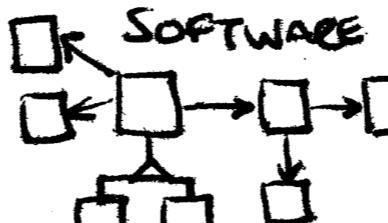


IN STORMWATCH

DEPLOY



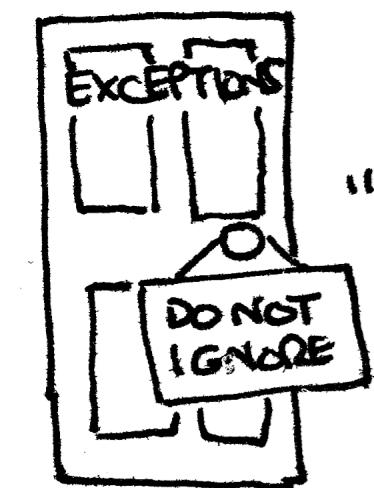
AFFECTS



PERF.  
MONITOR



MONITOR  
HEALTH



- handle & warn

"NO SUCH THING AS AN EXPECTED EXCEPTION"

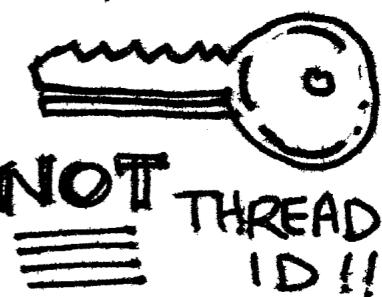
- capture all the data

LOG:

- ATTEMPTS
- DECISIONS
- PREPARATION
- SUCCESS
- TIMING
- COMPLETION

ONE LINE OF LOGGING  
MAY BE ALL YOU GET!

CONTEXT WITH  
EVERY LOG -



A CORRELATION ID

"LOG AS IF YOU  
WON'T HAVE  
ANYTHING ELSE!"



raygun.io

@deejaygraham

SPLUNK

NOT

THREAD  
ID!!!

METRICS.NET

SERILOG

ETW



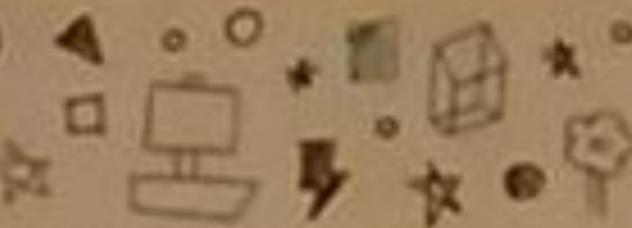
AKKA DINERS

@deejaygraham

# React for .NET developers

Macs Dickinson  
@MacsDickinson

**Memo  
Pad**

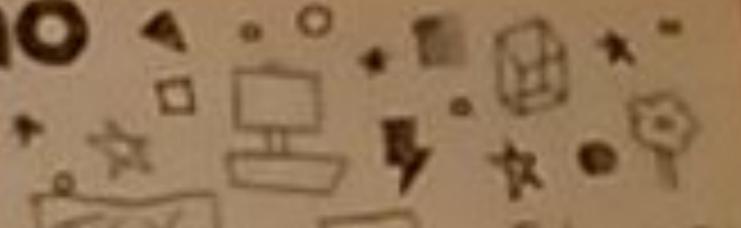


# REACT

637

- Easy to learn
  - Encapsulated language
  - Declared
  - Easy to plug in

## Memo



Pfeiffer

## COMPONENTS

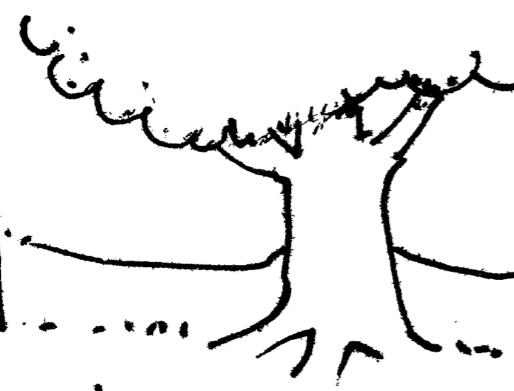
© Macmillan

Walt MacDowell 10

@eddy556

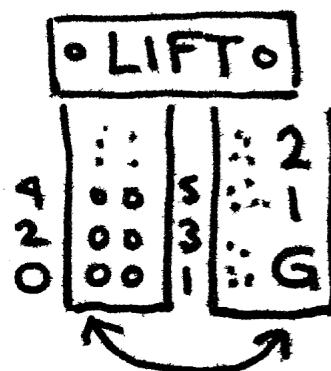
# Don't Make Me Feel Stupid

Liam Westley  
[@westleyl](https://twitter.com/westleyl)



Don't make me feel  
**STUPID!**

embrace different paths



Regional Variation:

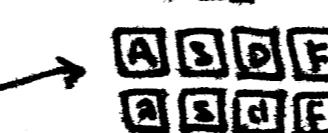
WINDOWS

TMI



VIEW STATE

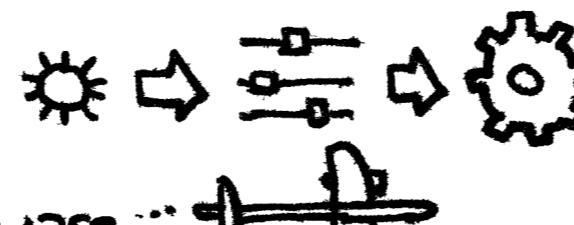
APPLE  
TLI



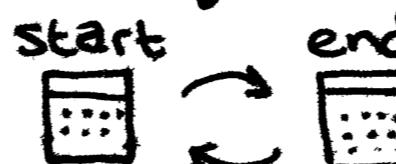
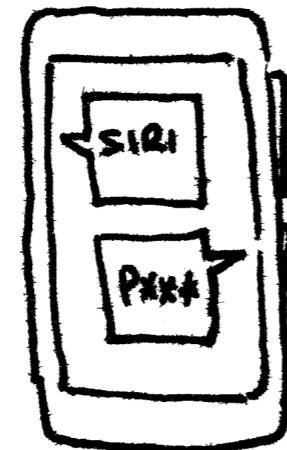
who moved



Android



Beware  
the  
end  
of  
March!



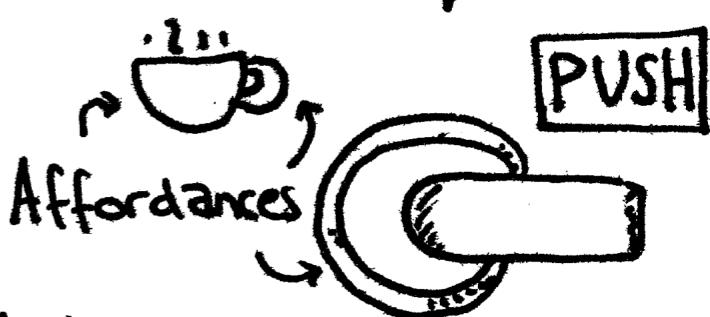
IF YOU DON'T BUILD  
IT, BE READY FOR  
YOUR USERS TO TRY  
TO BUILD IT



Surprise  
your user  
in a good  
way!



make friends with  
your designers



"We can and should question design decisions" @deejaygraham

liam Westley **DDDNorth**  
2015  
@westley1

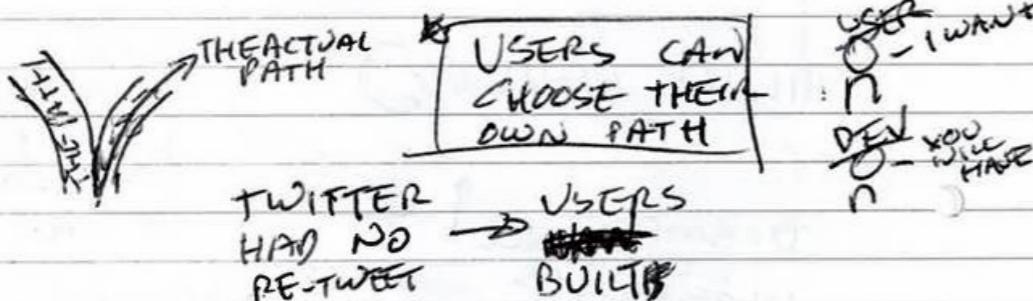
@deejaygraham

## DON'T MAKE ME FEEL STUPID

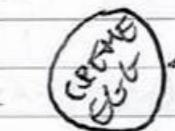
MOBILE TABLET.

VARIOUS UI

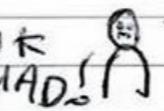
"TWO ROADS DIVERGED IN A WOOD, AND  
I TOOK THE ONE LESS TRAVELED..."



## REGIONAL DIFFERENCES

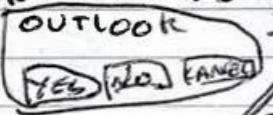


CHOCOLATE CHANGED TO AMERICAN



RED = GOOD IN CHINA

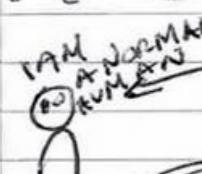
AFTER OUTLOOK HAS CLOSED



PONT FORCE USGS TO MAKE POINTLESS DECISIONS

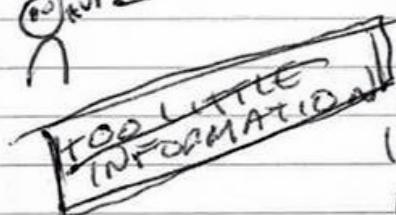
TOO MUCH INFORMATION

ODD UPDATES NOTIFICATIONS

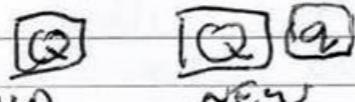


TECH TERMS  
"RESTORING VIEWSTATE"

ERROR MESSAGES "SOAP ERROR"



IOS KEYBOARD CASE



OLD

NEW

1

## CONSISTENCY

RECEPTION G  
(PRESS 0)

45%  
91%

RECEPTION G  
(PRESS 0)

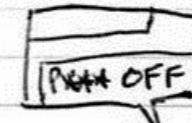
ctrl+F = FORWARD  
GMAIL IN OUTLOOK

ANDROID SETTINGS  
KEEP CHANGING

NOT FIND

## SURPRISE YOUR USERS

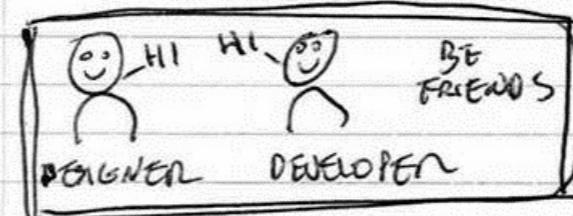
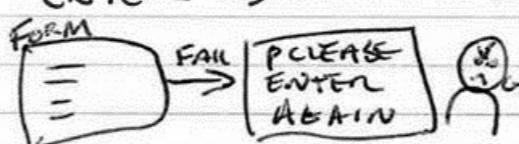
IN A GOOD WAY



AUTO CENSOR VOICE MESSAGES

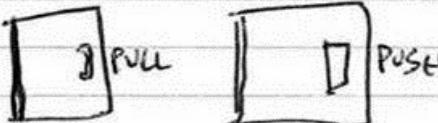
SWITCHING DATES  
CONFIRM FOR  
IMPORTANT/RISKY  
CHANGES  
24/07  
07/24

## ENTER USER DETAILS



DESIGNER DEVELOPER

AFFORDANCE  
GUIDING HAND  
TO USERS



DDD North is a free one day technical event for developers, a day of learning, discussion, contribution and involvement in the community in the North East, North West, Midlands and Scotland.



The goal of DDD North is to provide free technical education with the added benefit of the networking possibilities with peers and the development of relationships across the .NET Industry!

<http://www.dddnorth.co.uk/>  
<https://twitter.com/dddnorth>

**See You  
Next Year !**

<http://creativecommons.org/licenses/by-sa/4.0/>

