

SKILLS FOR IMPACTFUL DEVELOPMENT THAT MAKES A DIFFERENCE

BEYOND CODE

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Idea

FOR EXAMPLE

Imagine a tall giraffe, grazing in an East African safari park, towering over the visitors



COOL!

Suddenly we're all thinking and picturing
the same thing

ANOTHER EXAMPLE

Imagine the one iOS error message that makes you just want to pull your hair out...

Unity-iPhone > iPhone 6 Running Tanks on iPhone 6 5

Tanks PID 11358, Paused CPU 5% Memory 65.2 MB Disk Zero KB/s Network Zero KB/s

Thread 1 Queue: com.apple.main-thread (serial) ▲

- 0 GetBuffer [inlined]
- 1 GetGLName [inlined]
- 2 SetVertexStateGLES
- 3 DrawBuffers
- 4 DrawChunk
- 5 EndDynamicBatching
- 6 RenderDynamicBatch [inlined]
- 7 RenderMultipleMeshes
- 8 RenderMultiple [inlined]
- 9 non-virtual thunk to MeshRende...
- 10 Flush
- 11 PerformRendering
- 12 DoForwardShaderRenderLoop
- 13 DoRenderLoop
- 14 DoRender
- 15 Render
- 16 RenderCameras
- 17 PlayerRender
- 18 PlayerLoop
- 19 UnityPlayerLoopImpl
- 20 UnityRepaint
- 21 -[UnityAppController(ViewHan...]
- 22 -[UnityAppController startUnity:]
- 23 NSFireDelayedPerform

0x118362: movl -0x14(%ebp), %ecx
0x118365: movl 0x2a2(%ecx,%edx,4), %eax
0x11836c: addl %ecx, %eax
0x11836e: movl \$0x1406, %ecx
0x118373: movl -0x10(%ebp), %edx
0x118376: jmp *%eax
0x118378: movl -0x14(%ebp), %eax
0x11837b: movl 0x130a22a(%eax), %eax
0x118381: movl (%eax), %eax
0x118383: movl 0x24(%eax), %ecx
0x118386: jmp 0x11839b ; SetVertexStateGLES + 339 at VertexDeclarationGLES.cpp:132
0x118388: movl \$0x1401, %ecx
0x11838d: jmp 0x11839b ; SetVertexStateGLES + 339 at VertexDeclarationGLES.cpp:132
0x11838f: movl \$0x1400, %ecx
0x118394: jmp 0x11839b ; SetVertexStateGLES + 339 at VertexDeclarationGLES.cpp:132
0x118396: movl \$0x1405, %ecx
0x11839b: movzbl 0x4(%edi,%ebx,4), %edi
0x1183a0: cmpl 0x14(%ebp), %edi
0x1183a3: ja 0x1184d6 ; SetVertexStateGLES + 654 at VertexDeclarationGLES.cpp:99
0x1183a9: movl 0x10(%ebp), %eax
0x1183ac: movl (%eax,%edi,8), %eax
0x1183af: movl %eax, -0x1c(%ebp)
0x1183b2: testl %eax, %eax
0x1183b4: je 0x1184d6 ; SetVertexStateGLES + 654 at VertexDeclarationGLES.cpp:99
0x1183ba: movl %ecx, -0x2c(%ebp)
0x1183bd: movl 0xc(%ebp), %eax
0x1183c0: movzbl 0x5(%eax,%ebx,4), %eax
0x1183c5: movl %eax, -0x30(%ebp)
0x1183c8: movl -0x1c(%ebp), %eax
0x1183cb: movl 0x18(%eax), %eax
0x1183ce: movl 0x4(%eax), %eax Thread 1: EXC_BAD_ACCESS (code=1, address=0x4e8b) 44a
0x1183d1: cmpl -0x28(%ebp), %eax
0x1183d4: je 0x1183ff ; SetVertexStateGLES + 439 [inlined] SetVertexComponentData at VertexDeclarationGLES.cpp:144
SetVertexStateGLES + 439 at VertexDeclarationGLES.cpp:144
0x1183d6: movl -0x14(%ebp), %ecx
0x1183d9: movl 0x130a566(%ecx), %ecx
0x1183df: movl (%ecx), %ecx
0x1183e1: movl %eax, 0x4(%esp)
0x1183e5: addl %esp, %esp

0x1183e5: addl %esp, %esp

8ACE315A-5AE8-40AD-9892-E281117219F8/data/Containers/Bundle/Application/9E666D9D-379C-48B8-803E-6C7B20C02FC2/Tanks.app/Data/Managed/System.dll (this message is harmless) (lldb)

Auto All Output

Cocoa Touch Class - A Cocoa Touch class

Test Case Class - A class implementing a unit test

Playground - A Playground

HMM

Chances are, we didn't all picture the same
image...

FINALLY

Imagine the various steps and paperwork
required to buy a house

ERR...

If you haven't gone through it, you
probably have no clue what to expect

ERR...

And if you have, you may remember
painstakingly learning what's involved
when purchasing property

IDEAS

We can only imagine what we know

TODAY

I promised a talk on how to grow your
impact...

THE ANSWER

Make it really easy for other people to tap
into your brain and knowledge

IMPACT

But.. I already blog, livestream, tweet,
mentor, and publish open source!

IMPACT

We are more than the code we write

IMPACT

We have so much knowledge, and often we only share a fraction of it.

IMPACT

We're people in an exponentially growing industry, that for many others, is extremely hard to grasp

IMPACT

And we have the opportunity to welcome
everyone into this space

EXPLOSION OF GROWTH

We touch our phones on average 2,617 times a day (read: 3 times a minute, every minute!)*

EXPLOSION OF GROWTH

Over 89% of big data has been produced
within the last 2 years

EXPLOSION OF GROWTH

50% of today's tech growth derives from disruptive tech such as AR/VR, Robotics, SaaS, Artificial intelligence, and so on

EXPLOSION OF GROWTH

The technology industry is on pace to exceed \$5.3 trillion in 2022

EXPLOSION OF GROWTH

As of Q4 2021, there's an estimated 1.47 million tech startups around the world (FinTech being the largest subcategory at 7%)

EXPLOSION OF GROWTH

Technology and the industry have been
growing exponentially

EXPLOSION OF GROWTH

...but access is still limited.







LIMITED ACCESS

In 2021, female founders secured only 2% of venture capital in the US, down from 2.3% in 2020...

LIMITED ACCESS

But look around you... we're all using technology. We're all *relying* on technology.

MY CLIENTS ARE WORKING TO:

Reduce the burden of proof in domestic abuse cases

MY CLIENTS ARE WORKING TO:

Increase education and certification for
incarcerated folks

MY CLIENTS ARE WORKING TO:

Allow people to get financial assistance in
90 seconds

IMPACT

How can we use our skills and knowledge to make technology more accessible for everyone?

IMPACT

And why the heck does it matter?

STORYTIME

I'd like to tell you three stories

The One Where Developer Happiness Took Center Stage

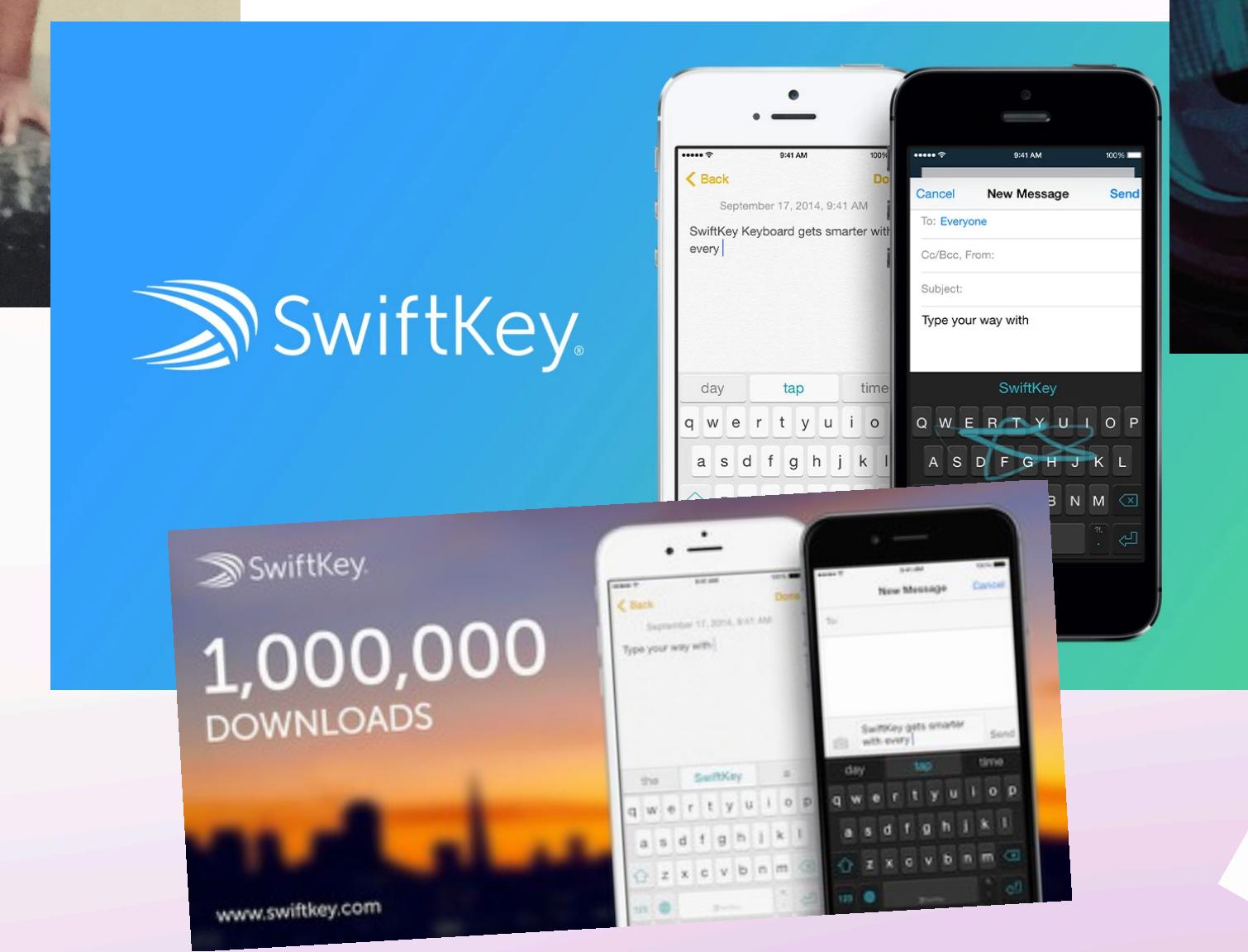
The One Where They Were Hit
With a Blast From the Past

The One Where Shortcuts Are
~~Allowed~~ Encouraged

BUT NOT ALL DEVS...!

WHY

How do we end up here? Why is this
happening?



MENNENIA

Curiosity

MENNENIA

Familiarity

Comfort

COMFORT

Knowing what to expect
Not being taken aback or surprised
Understanding cause and effect

Discomfort





JOURNEY

MAP

ES

CUSTOMER

Journey

PROBLEM

Idea

IT'S REAL

Technophobia is described as “abnormal fear or anxiety about the effects of advanced technology”...

IT'S REAL

...affecting one third of the population,
causing health problems and the inability
to work efficiently (2019)

Discomfort Is Real

EXPECTATION

Because what if you have no idea what will happen..?

EXPECTATION

Think of a horror movie, where you're in continuous suspense, unable to relax

EXPECTATION

What if you're basing your belief on something inaccurate?

EXPECTATION

Like... basing love on a Disney movie



EXPECTATION

Many people don't trust what to expect
because they've been burned in the past

CONUNDRUM

How can we draw the right conclusions
between cause and effect, so we know what
to expect...?!

THINK ABOUT IT

Sometimes we have the same inputs but
get different outputs

THINK ABOUT IT

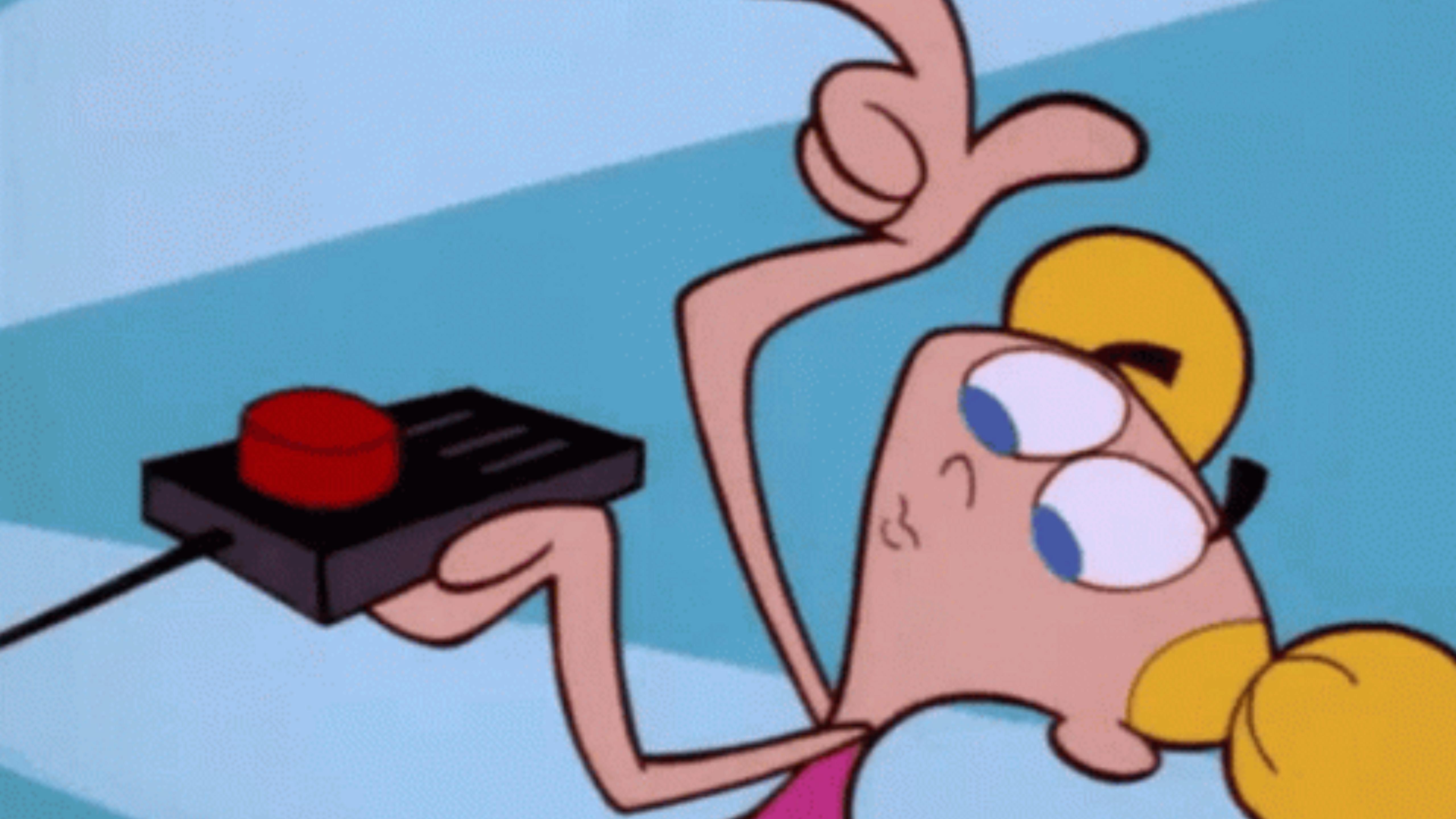
Sometimes we have different inputs but
still achieve the same outcome

EXPECTATION

How can we improve expectations?

HOW TO IMPROVE EXPECTATIONS

Usually... it's experience. Trial and error with cause and effect.



HOW TO IMPROVE EXPECTATIONS

But you have to be comfortable learning through trial and error — and not everyone has that luxury

CONUNDRUM

Sometimes... you don't know what you don't know

CONUNDRUM

Sometimes we don't know how to
communicate our expectations...

CONUNDRUM

Sometimes we don't even realise we have them?!

so

what do we do about it

IMPACT

We have so much knowledge, and often we only share a fraction of it.

IMPACT

So we need to figure out which pieces of knowledge we have that is worth sharing and how best to do so

ONE

Ask questions to identify the missing piece
of information

WHAT

What is the mental model of the other person?

WHAT

What expectations do they have and based
on which beliefs?

WHAT

“Why is _____ important to you?

WHAT

“What are you hoping to achieve and how do you think I can help?”

WHAT

Be curious about why someone is asking
the questions they're asking

WHAT

Practice thinking of questions the other person might not have even thought to ask

ASK YOURSELF

Are we using the right tool for the job?

ASK YOURSELF

Do we have the right person for the job?

ASK YOURSELF

Do we have the right timeline for the goal?

ASK YOURSELF

Do we have the right complexity for the goal?

TWO

Communicate in the most common denominator: everyday language.

HOW

Often we explain technology with... more
technology

HOW

But ideally we use language and examples
we all have in common

HOW

Build bridges between what most of us
know and the unknown

HOW

Use stories and metaphors to make complex ideas accessible



HOW

Metaphors aren't perfect, but they unlock doors.

HOW

Stories are complete. They have a beginning, a middle, and an end.

HOW

Both can be used to strengthen someone's understanding of cause and effect

HOW

Rather than thinking of it as ‘business speak’ or the stuff that PMs do, draw connections between how your decisions can impact a budget or timeline

BONUS

Capture the shared understanding visually,
in diagrams or drawings

SIMPLE STEPS

Pause. When you notice yourself rolling your eyes at someone's "ignorance", take a minute to ask yourself

SIMPLE STEPS

What am I missing? What can I ask to understand more about what's going on here?

SIMPLE STEPS

Keep practicing

TODAY

I promised a talk on how to grow your
impact...

IMPACT

So here's the secret: be able to recognise what others need, and when, and then find common ground to *transfer ideas*

BUT

Maxim... isn't that why we have PMs? And designers? And a CTO? Why me?

IMPACT

We have so much knowledge, and often we only share a fraction of it.

IMPACT

Connecting dots is what we do

THE ANSWER

Make it really easy for other people to tap
into your brain and knowledge

THE ANSWER

And just maybe, we might build a world where innovation is effortlessly created by the diverse people it aims to serve.