## The Reasonable Developer

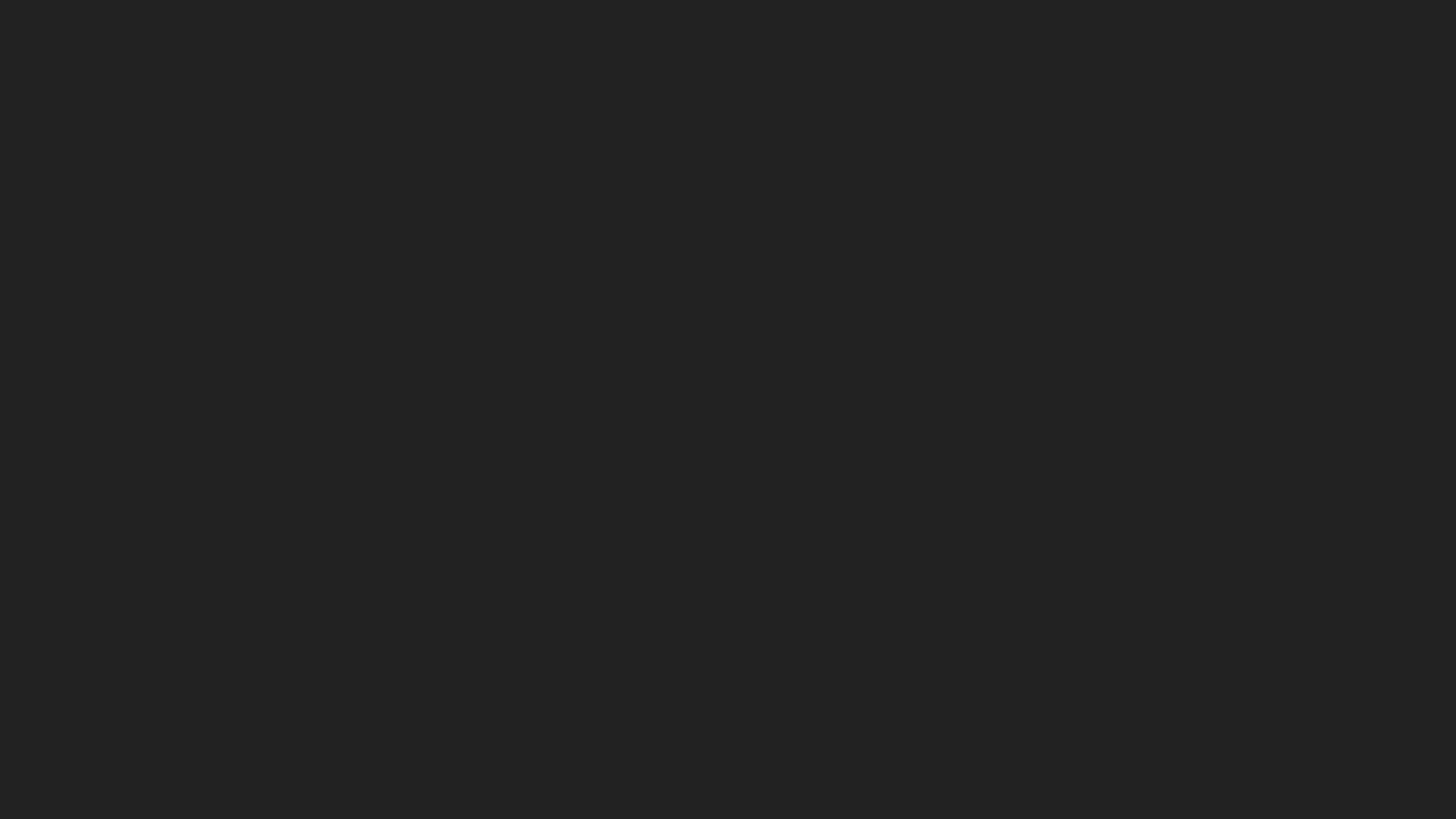
Paul Verbeek-Mast Front-end Developer @ Werkspot

### Content warnings

Detailed description of sexual assault

Image of raw meat

Image of Mark Zuckerberg





"I'm just an engineer."

## "Once the rockets are up, who cares where they come down?"

– Tom Lehrer (in 'Wernher von Braun')

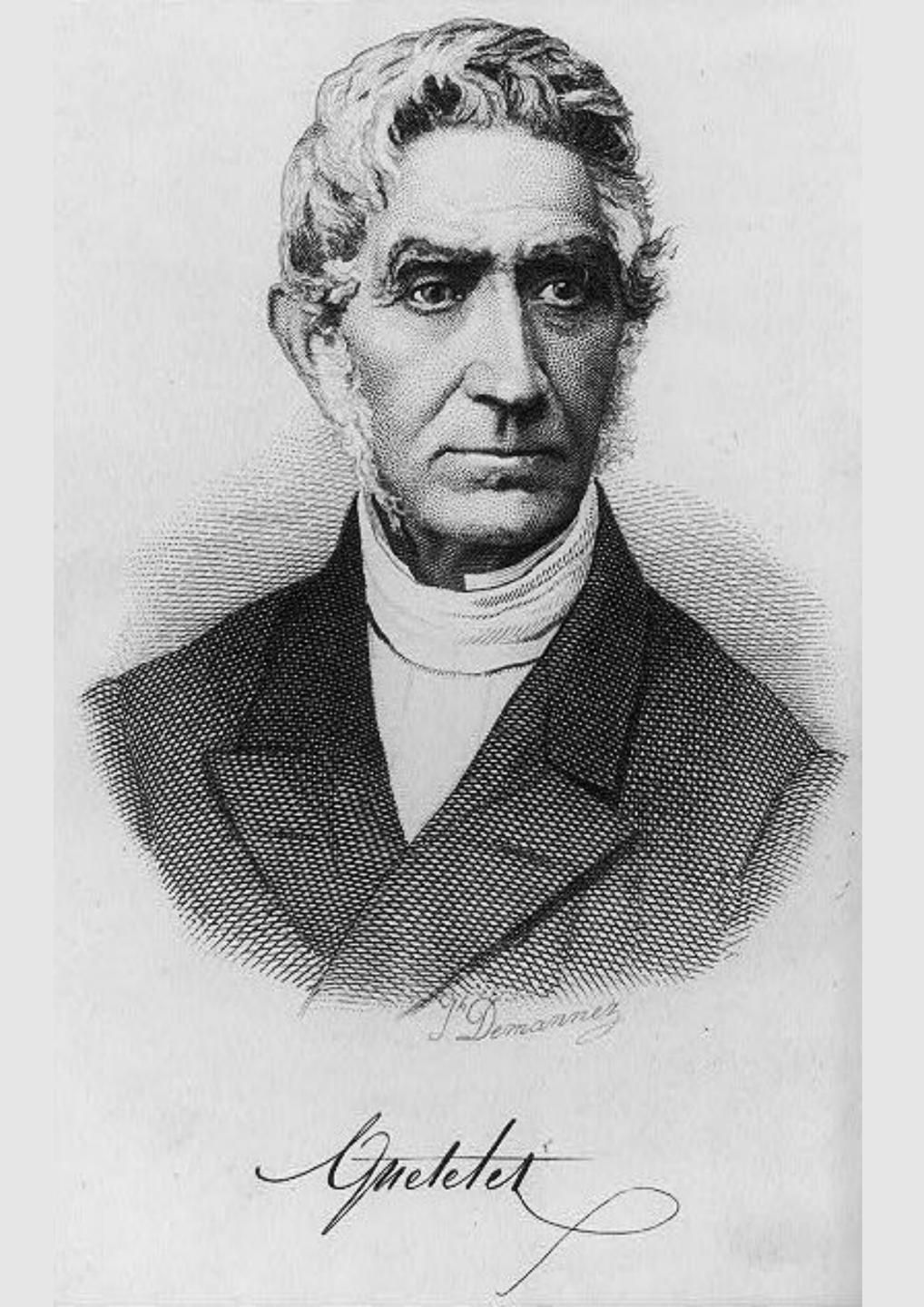


## The Reasonable Developer

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### Reasonable

having sound judgement; fair and sensible

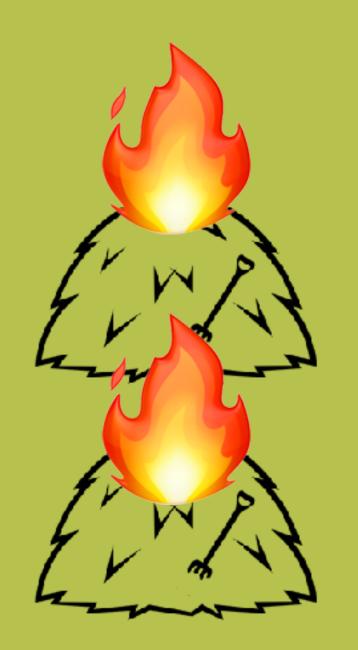


## Normal distribution & standard deviation

L'Homme Moyen (The Average Man)

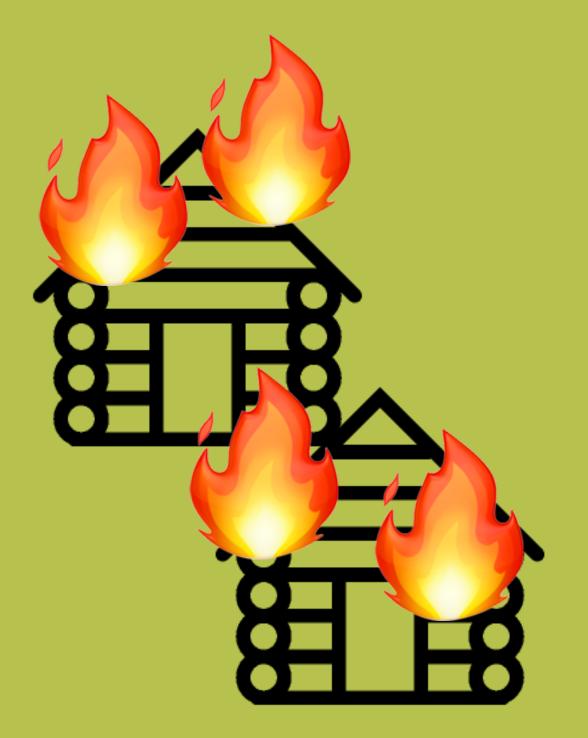


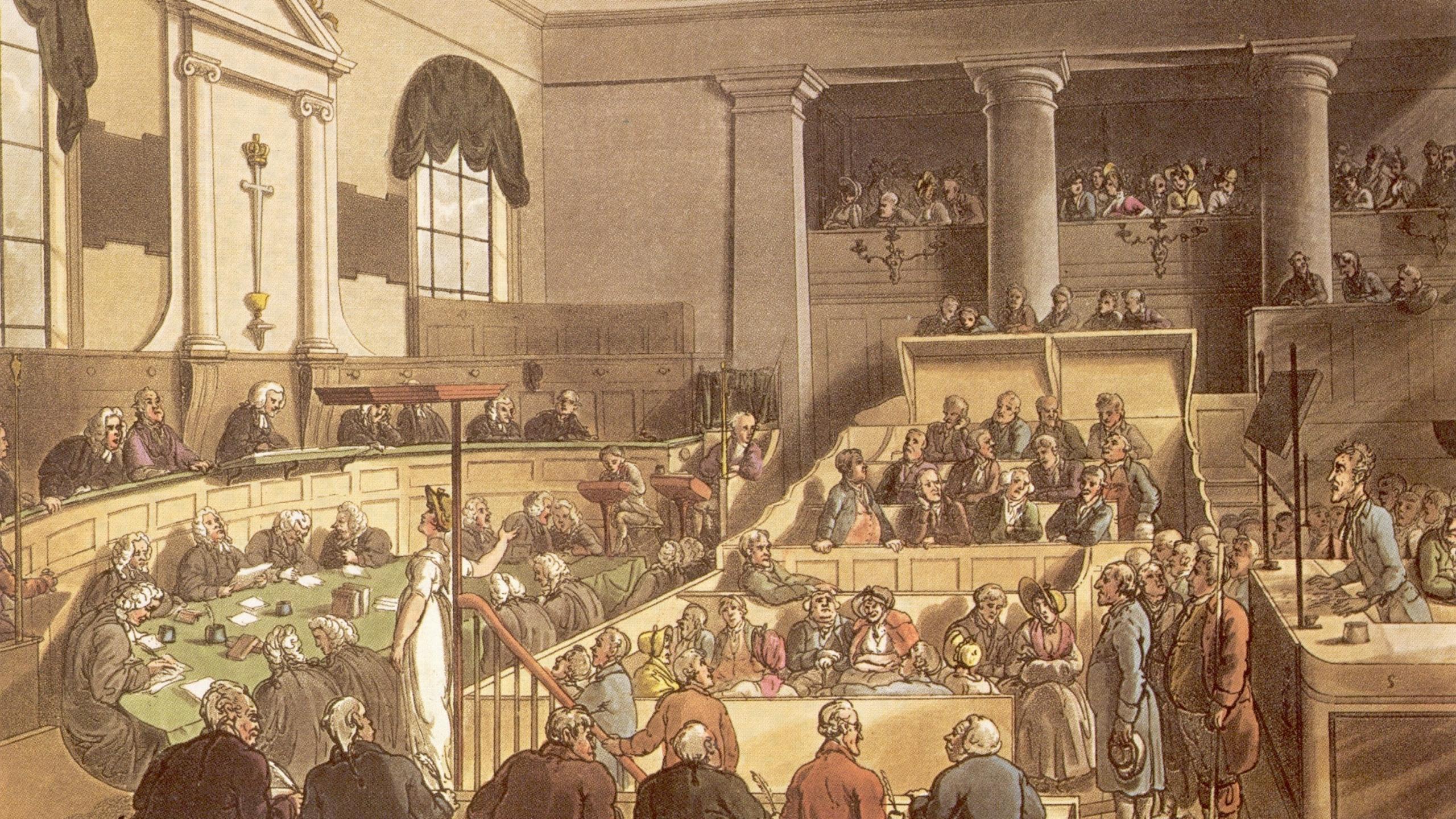
#### Menlove

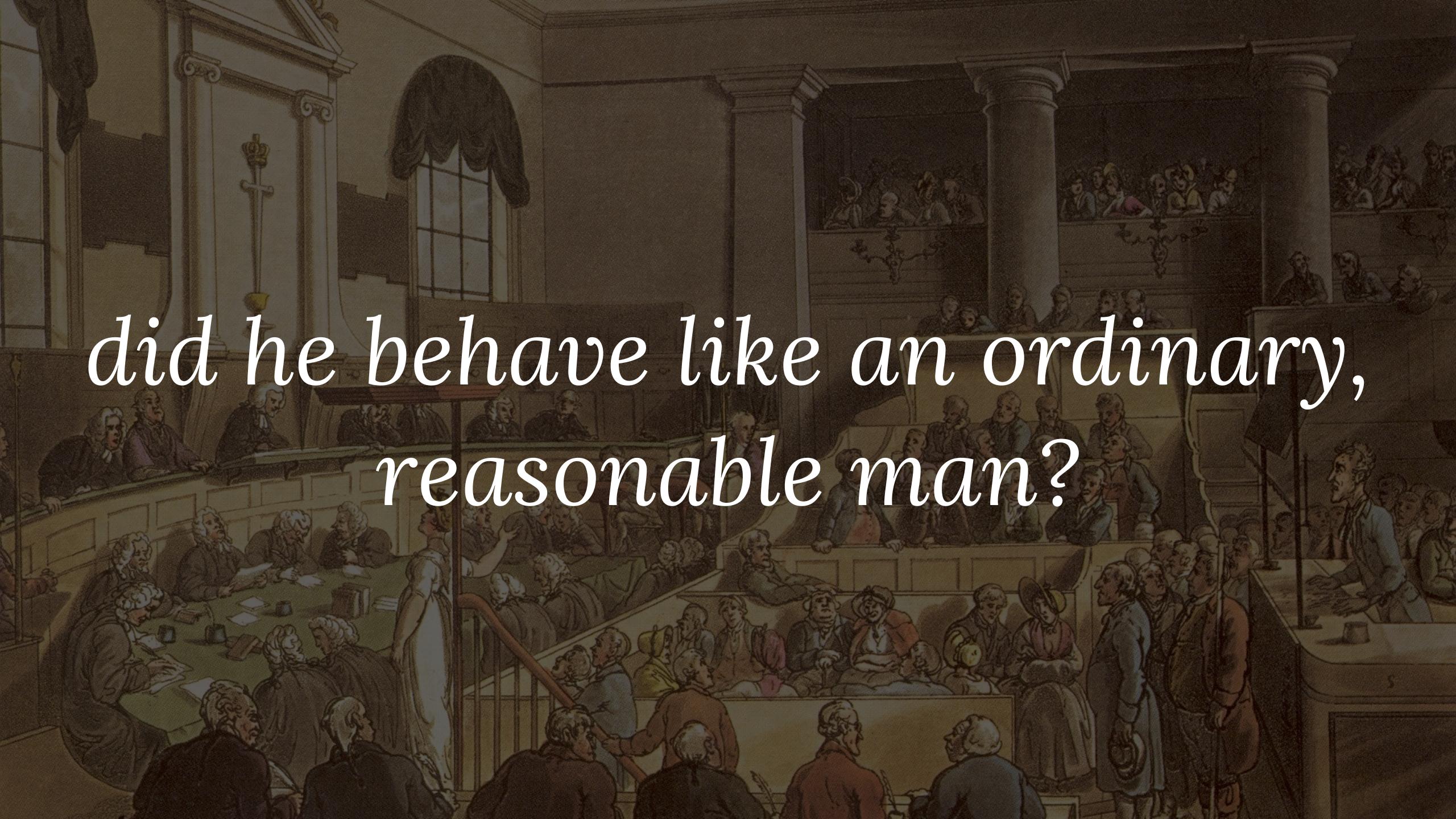




#### Vaughan







## The Legal Village



reasonable hairdresser



reasonable officer



reasonable person

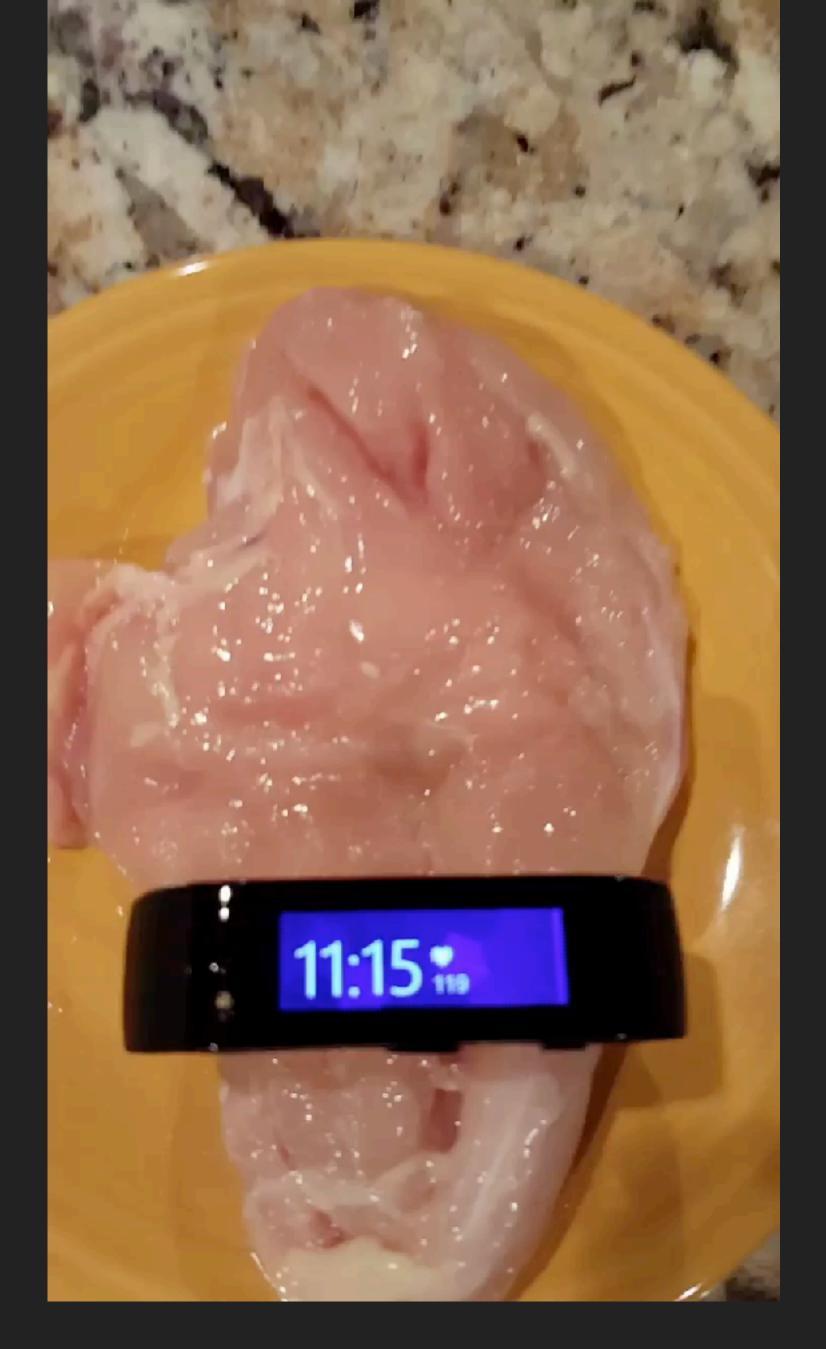


ordinary prudent man of business



fair-minded and informed observer

## "Fitbit helped expose woman's **false rape claim** in Lancaster County"



https://twitter.com/internetofshit/status/692004889380179968





## facebook

"The ugly truth is that we believe in connecting people so deeply that anything that allows us to connect more people more often is \*de facto\* good. It is perhaps the only area where the metrics do tell the true story as far as we are concerned"

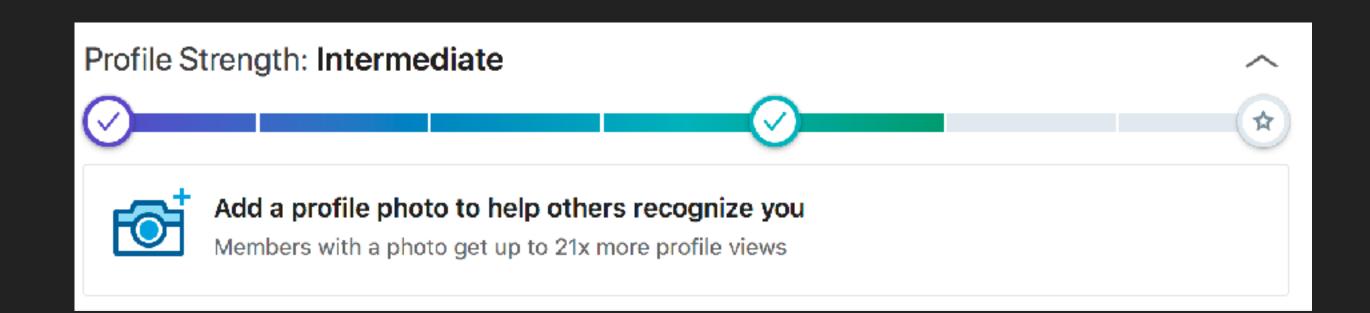
— Andrew Bosworth, VP @ Facebook https://www.buzzfeed.com/ryanmac/growth-at-any-cost-top-facebook-executive-defended-data



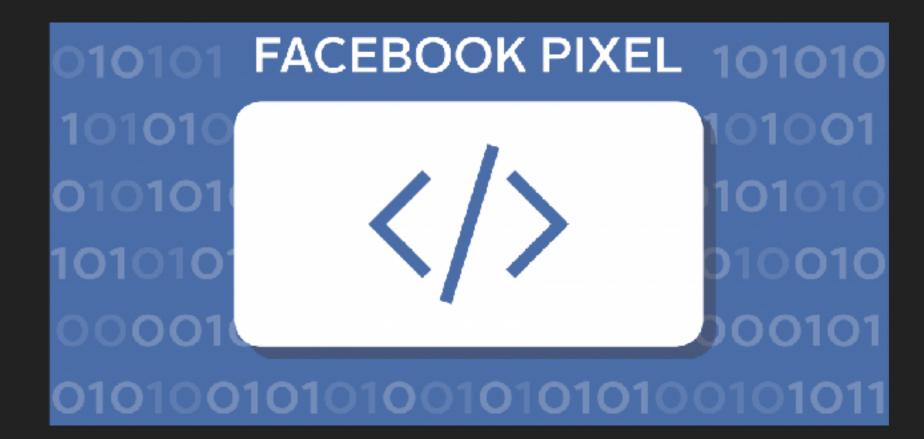
(L)

You just missed it! Our last room sold out a few days ago.

Your dates are popular – we've run out of rooms at this property! Check out more below.

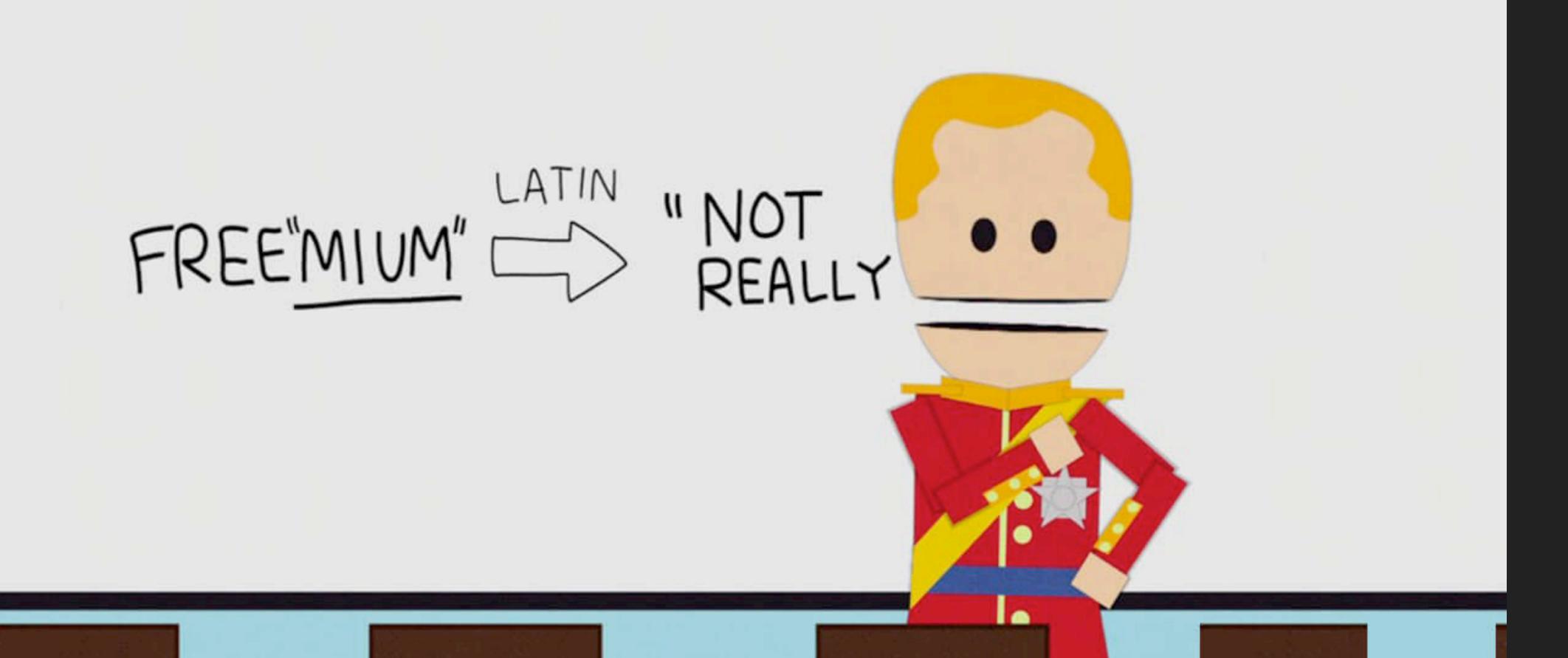


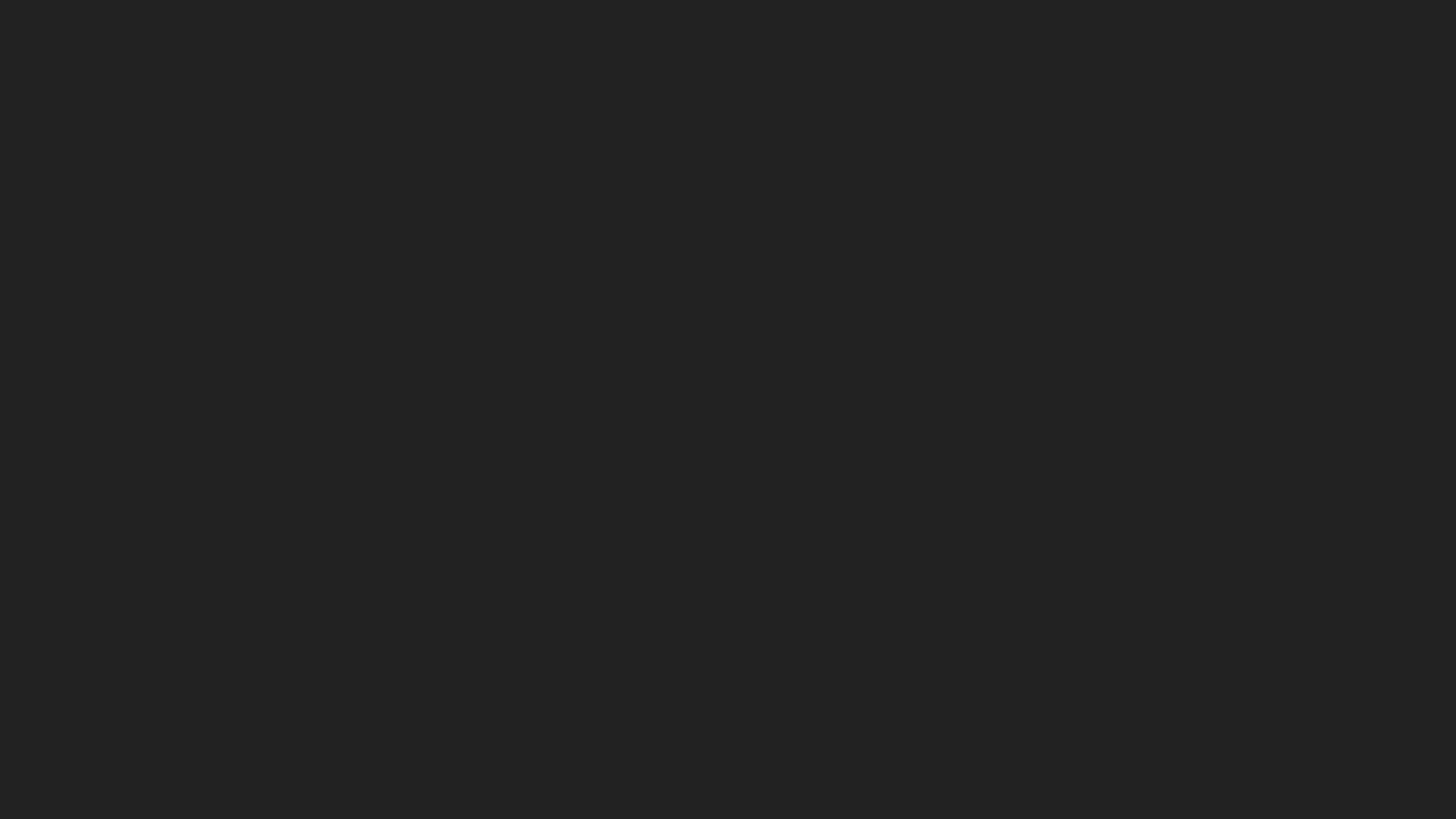
Date of Birth: \* (eg. 05/21/1970)



# Ethical dilemmas are everywhere

## What is your product when it's "free" to use?





### What is "safe enough"?



Replying to @c\_pellegrino @PWTooStrong @Telekom\_hilft

Hello Claudia! The customer service agents see the first four characters of your password. We store the whole password, because you need it for the login for mein.tmobile.at ^andrea

8:29 AM - 4 Apr 2018

546 Retweets 447 Likes







#### T-Mobile Austria @ @tmobileat · Apr 5

Hi @c\_pellegrino, I really do not get why this is a problem. You have so many passwords for evey app, for every mail-account and so on. We secure all data very carefully, so there is not a thing to fear. ^Käthe

303 🕽 350 🖰 314





#### Eric™ @Korni22 · Apr 6

Well, what if your infrastructure gets breached and everyone's password is published in plaintext to the whole wide world?

↑ 80 ° 1.6K





#### T-Mobile Austria 🔮 @tmobileat · Apr 6

@Korni22 What if this doesn't happen because our security is amazingly good? ^Käthe



## How much effort should we put into preventing misuse?

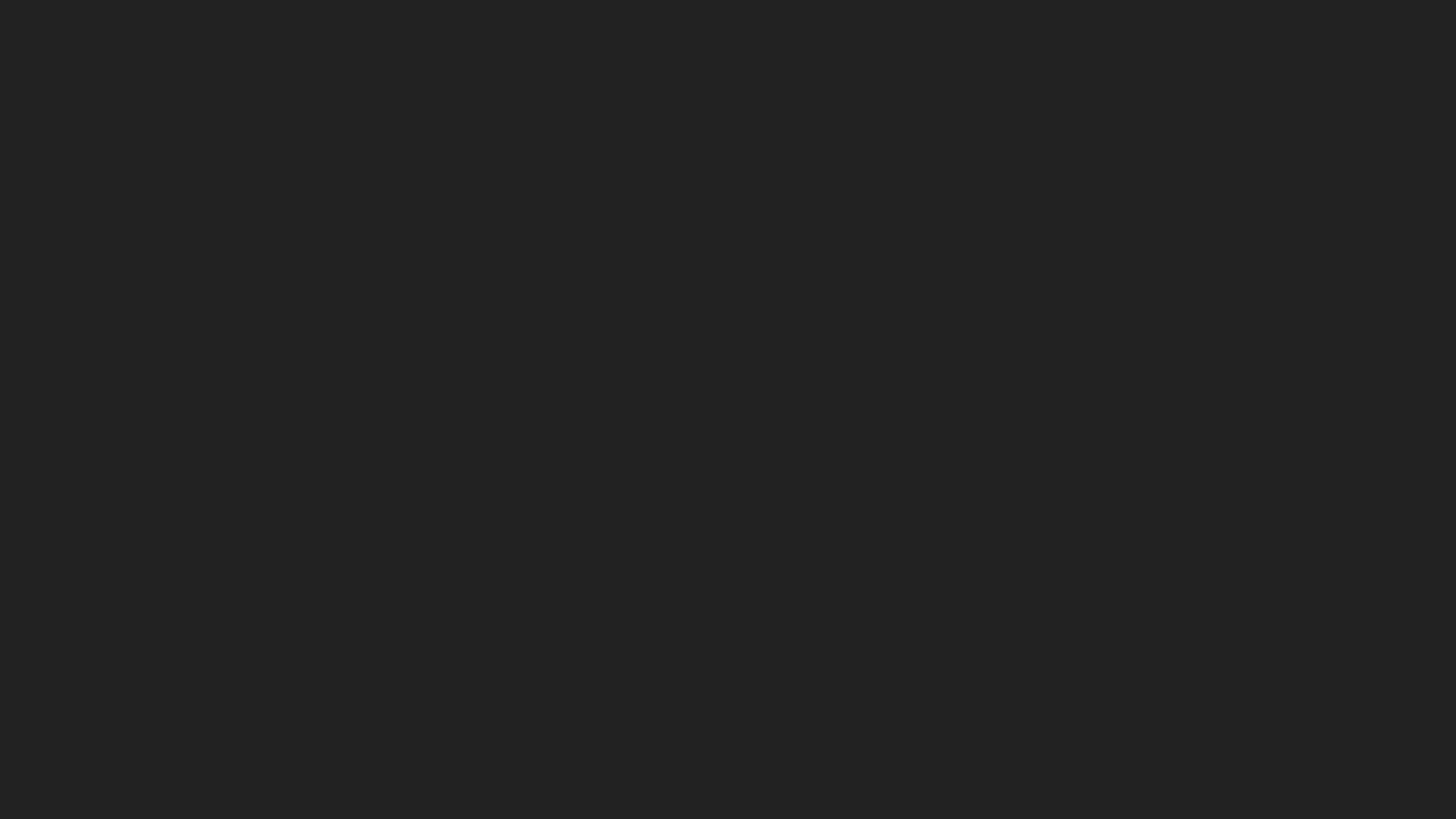




### Should I fix this bug?

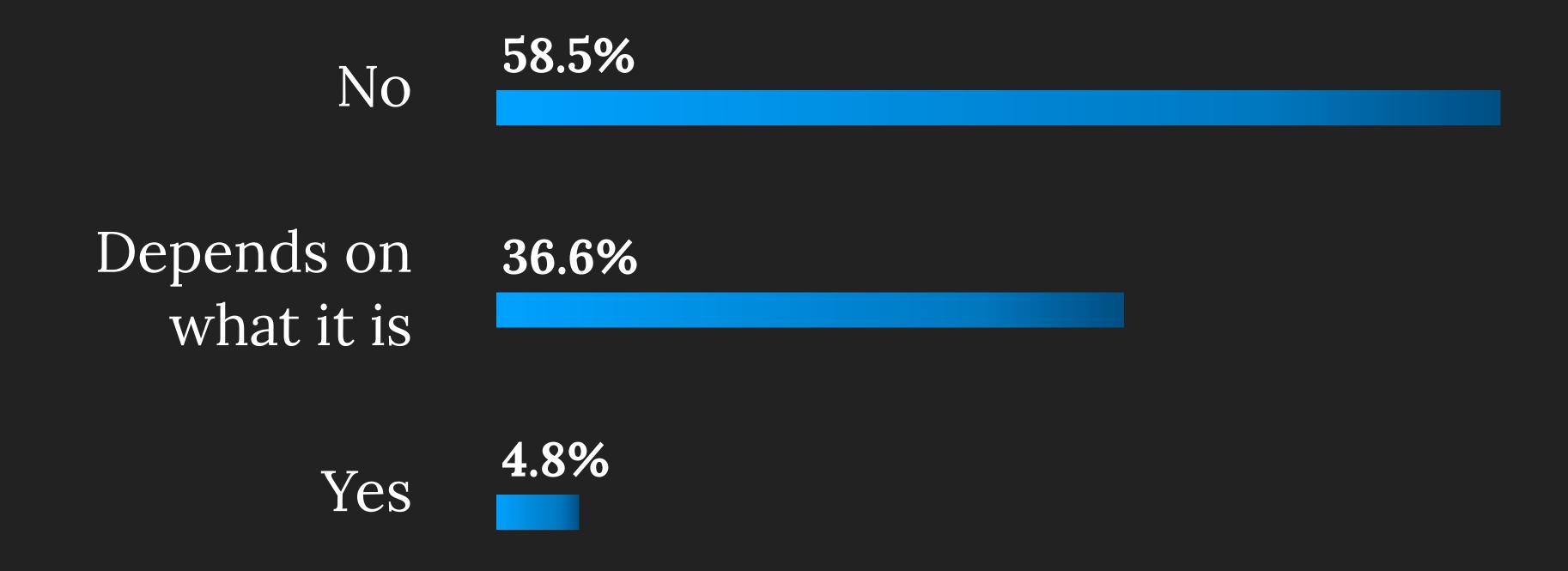
## How much harm can this bug cause?

## What are we **sharing** back to the community?

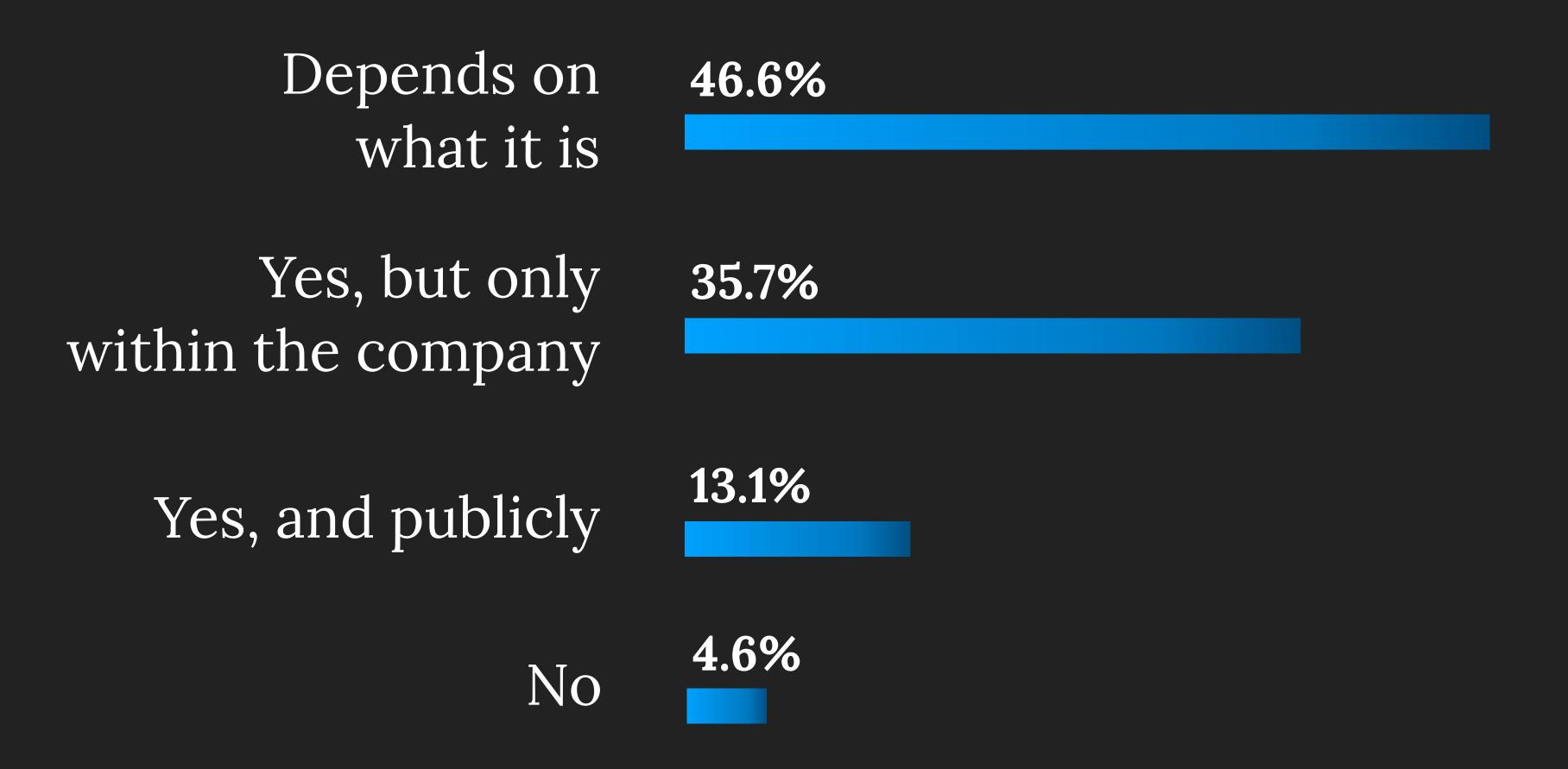




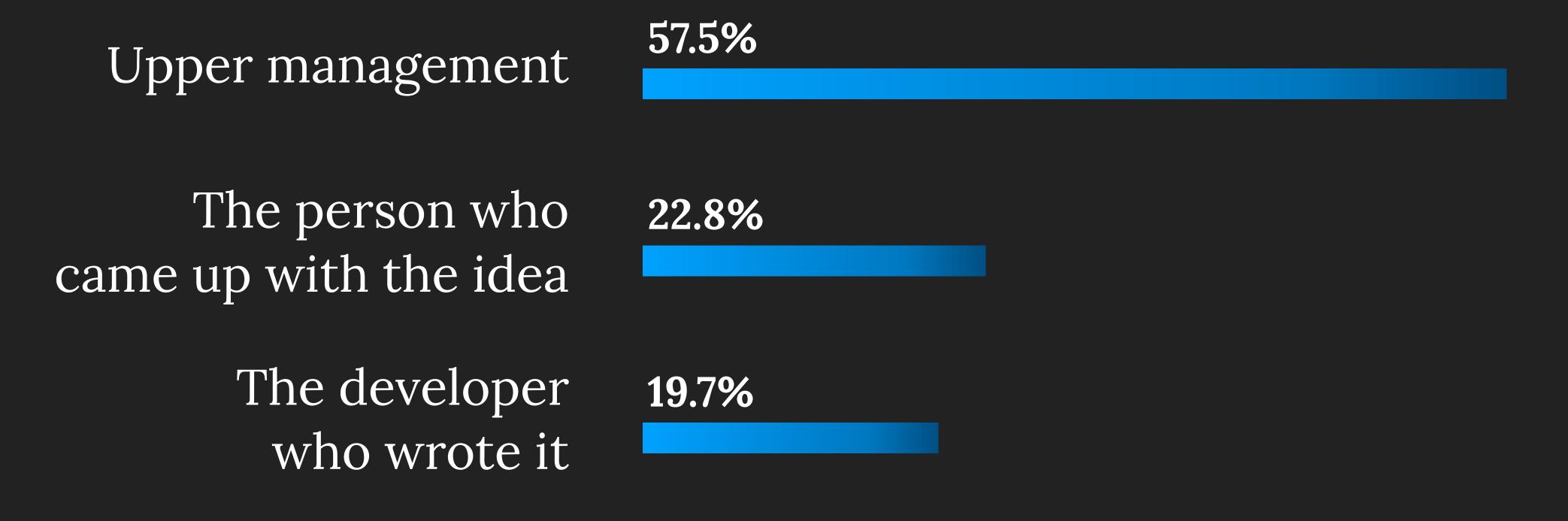
#### Would you write code that's clearly unethical?



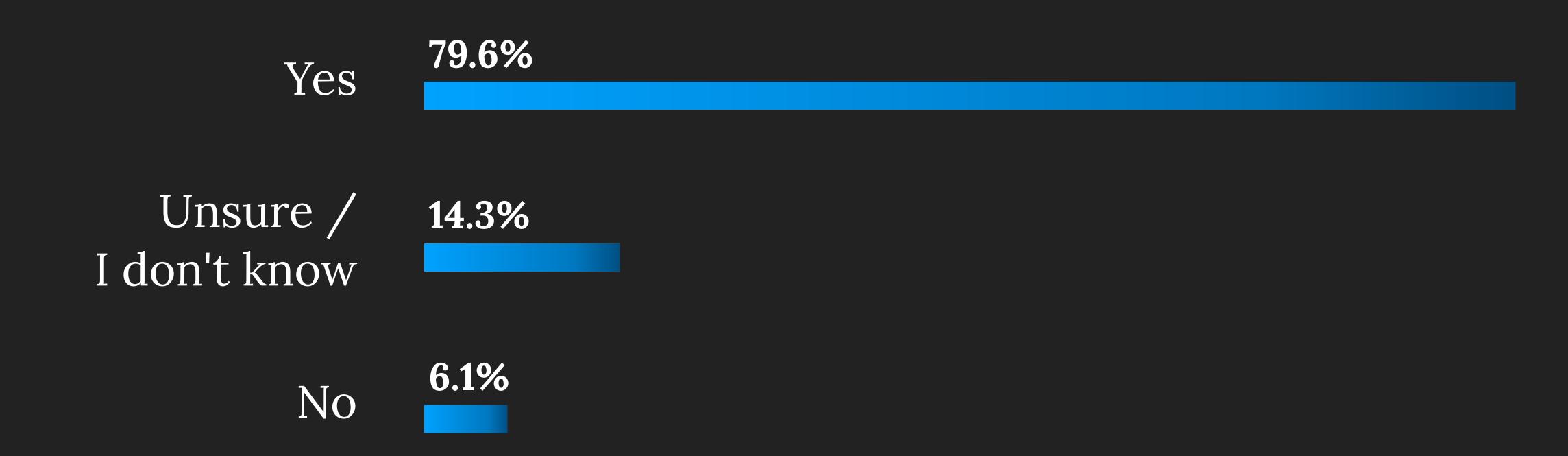
### Would you report unethical code?



### Who is ultimately most responsible?



## Do developers have an obligation to consider the **ethical implications** of their code?



## Reasonable Developer

- 1. Does not write code that's clearly unethical;
- 2. Reports any unethical code;
- 3. Holds upper management responsible for accomplishing something unethical;
- 4. Is obligated to consider ethical implications of their code.

## Code of Ethics





#### ACM Code of Ethics and Professional Conduct

#### "An ACM member should"

- 1. Avoid harm;
- 2. Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing;
- 3. Be fair and take action not to discriminate;
- 4. Design and implement systems that are robustly and usably secure.

### ACM Software Engineering Code

#### "A software engineer should"

- 1. Accept full responsibility for their own work;
- 2. Be careful to use only accurate data derived by ethical and lawful means, and use it only in ways properly authorized;
- 3. Avoid associations with businesses and organizations which are in conflict with this code.

#### ACM Code of Ethics and Professional Conduct

https://www.acm.org/about-acm/acm-code-of-ethics-andprofessional-conduct

### ACM Software Engineering Code (with IEEE)

https://ethics.acm.org/code-of-ethics/software-engineering-code/

#### IEEE Code of Ethics

https://www.ieee.org/about/corporate/governance/p7-8.html

# What if you encounter ethical problems?

### What is the problem exactly?

Who is affected?

### What are the internal procedures?

What are the alternative actions?

## ICAEW framework for resolving ethical problems

https://www.icaew.com/technical/ethics/framework-for-resolving-ethical-problems

# Santa Clara University framework for ethical decision making

https://www.scu.edu/ethics/ethics-resources/ethical-decision-making/a-framework-for-ethical-decision-making/

# Ethics is an integral part of software development

# Don't just act reasonable. Act responsible.

# Create your own code of ethics, and live by it

# You are not "just an engineer"

## Thank you

# Paul Verbeek-Mast @paul\_v\_m

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