My Name Is Not Cassandra: AppSec and “I Told You So”

Belgian Cybersecurity Coalition 2025

Izar Tarandach

Who am I

…and how did I land here.

fineartamerica.com

How I see myself

How developers see me

imdb.org

But in reality, this is who I might be …

Name: Cassandra Of Troy

Call to fame: Cursed Prophetess

Also famous for: insanity, fits and tantrums

Superpower: Able to see the future accurately

Curse: Nobody believes her prophecies

Action: “Woe is me”, “o cruel fate”, asking Apollo to lift the curse

Cassandra in AppSec

- Design: “this might not be secure as designed” vs. “nobody likes to hear that their baby is ugly”
- Development: “do not use this function - it is insecure” vs. “it works for me so there”
- Testing: “when you try to upload a JPEG, the system borks” vs. “only text will be uploaded and it works to spec”
- Deployment: “this library has 12 critical CVEs and an EPSS index of 1 so it will be exploited” vs. “says who?”
- Post-mortem: “i told you so” vs. “**you** are responsible”
- Appeal to authority: “Here’s what needs to happen (by you)” vs. “Here’s what needs to happen (by the $5k/hr consultant)”

The Traditional Department Of No

We would like to have a public-facing endpoint to help customers …. NO

We need this application in order to optimize the way we … NO

We aim for performance, so we'd like to code this thing in C … NO

We want to open-source this really neat tool we created … NOPE

We need to grow out of it.

Join me in my time machine.

Once upon a time …

… there was a team building a product.

They had a lot of technical debt.

They had a very active rotation in their roster.

They made a lot of money for the company.

They also had a lot of security issues.

I was their HQ-mandated security consultant.

DALL-E

… and the way I tried to “fix” it …

DALL-E

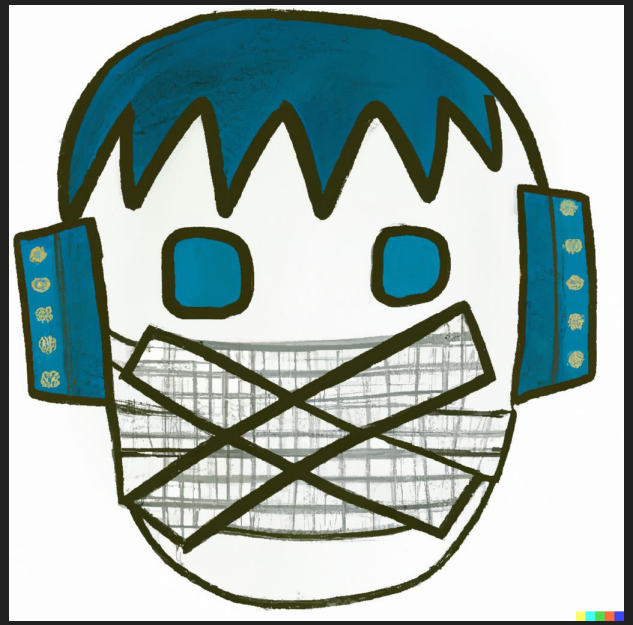
I came out with a long list of all their gaps.

I pointed out possible mitigations.

I even gave them some time estimates!

It did not go down well.

“Please stop talking to our security consultant…”



DALL-E

… everytime he gets more details, we get more problems.

I was going about it the wrong way. The very wrong way.

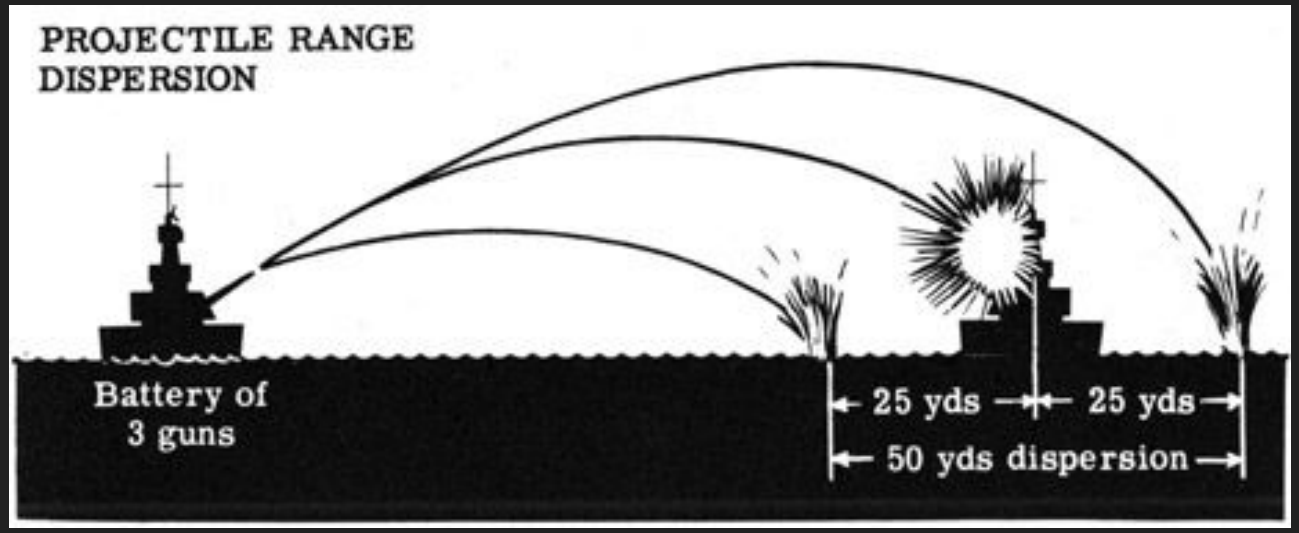
I made their dragon my own pet.

Developers are very smart people. They don’t quite appreciate what they can perceive as micro-management, certainly from someone not in their chain of command.

What were my mistakes?

- I believed that, having been a developer, I could understand how my message was getting through to developers; no, there's a reason why i went to security and they didn't.
- I cared more about their security than they did (*"my threat model is not your threat model"*)
- I was not the one executing; I had no right to expect things to be executed the way I wanted
- Consultant as a seagull: I flew in, deposited something on the table and flew out

The Artillery Ranging System - Goldilocks Method



https://maritime.org/doc/firecontrol/partc.php

So let’s bug people about their output, instead!

- “Security code is quality code”
- “Horrible things will happen if you don’t do things right”
  (right == ‘the way I want you to do it’)
- “That’s not how that needs to be” (needs == ‘your way is not my way)

flickr.com

That didn’t work either.

“We haven’t had any issue until now, and we’ll deal with it IF we ever have one.
Btw, you’re being too pushy.”

financialish.com

Nobody likes to buy insurance.

It’s time for a new approach. “Radical support”!

- Smart people want to be supported as they learn their own way
- Radical support means allowing people the opportunity to make mistakes and then to learn from them. It implies I reserve power and influence for preventing catastrophe rather than getting my own way.

Michelle Bourgeois in a LinkedIn post

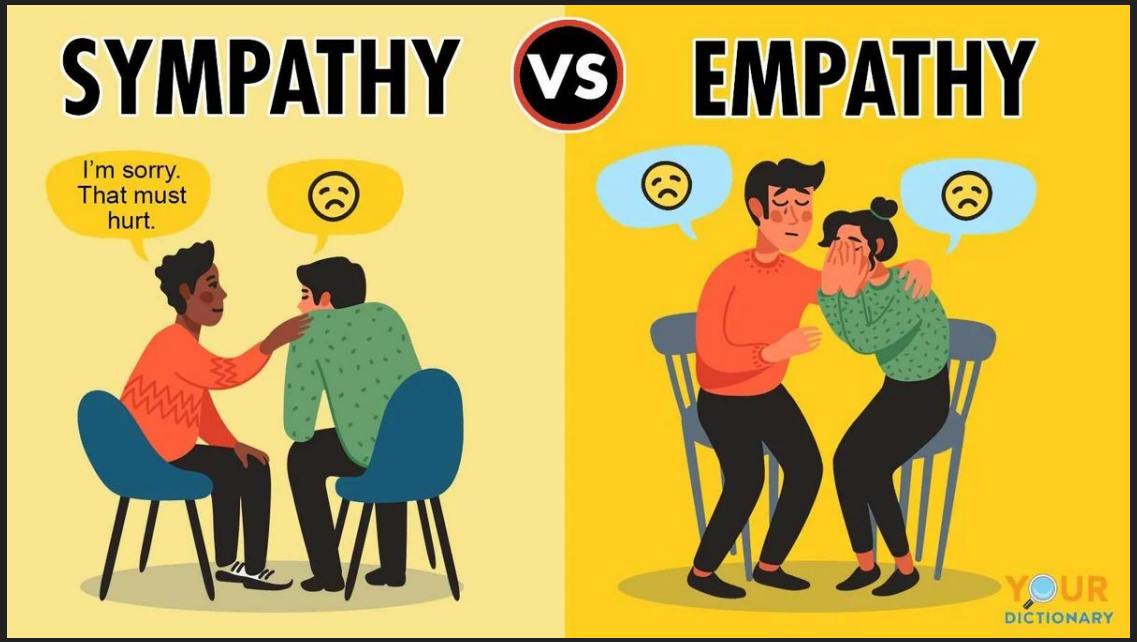
How did that one fail?

coachingforleaders.com

- Alienated myself from the work being done
- Was absent when the team actually wanted input
- It wasn’t leading from the sidelines, it was call me when you feel like it

Soft Skills For Security

- Adam Shostack, a thought leader in Threat Modeling, posits these soft skills as essential for security professionals
  - Active Listening
  - Respect
  - Assumption of good intentions
  - Patience
  - Collaboration
- These don’t serve as a plan of action, but surely help deliver one!
- Let’s add one more…**empathy**!



yourdictionary.com

With empathy, we can put ourselves in the place of the other and identify with them.

It differs from my first approaches - the problem is still theirs, but I am there feeling the pinch with them. “Together we win!”

Oy, did that backfire.

- There’s a difference between the formal meaning of empathy and the informal one - we’ll get to that in a bit
- “Commiserate - to express or feel sympathy for other”, but …

The word’s etymology comes from “to be miserable together”

But then my wife told me…

- I am lucky to be married to a Management professor with a very strong body of research in, among other things, compassion in the workplace.

  “You should look into what empathy actually is, formally”, she said

- Emotional empathy is where you can feel another person’s emotions
- Cognitive empathy means you can understand another person’s perspective

(there are other types of empathy. These are the most relevant here)

Perspective-taking and leading without authority

- Decision-makers are not only the C-suite - as a security professional, the most junior developer writing lines of code becomes a very central decision-maker
- Adopt the perspective of decision-makers to understand how they see your plans
- Look at the issue you are trying to push as a selling exercise. What will, in the eyes of your “customer”, make the sell more attractive?

Practically, that means that I had to …

- Tailor the pitch
- Manage both sides of the conversation
- Suggest solutions, rather than give instructions
- Find the right time to push or to walk away

- Convince people that becoming allies is in everyone’s best interest, always.

The results - what I want you to take away from this talk

- Today, more times than not I am able to use these patent-pending, extremely original but hey, learned with sweat Jedi mind tricks to exert influence

- I feel I am a better professional by being able to see most sides of an issue
  - What motivates whom
  - Barriers to execution
  - Personal motivators and demotivators

- Easier to identify mines in the path and things that can go kaboom later on

- Much better and healthier relationships with other team members, as they see I am giving space to their universe rather than pushing an inflexible “security-no”

… and now Security means

We would like to have a public-facing endpoint to help customers …. Yes, if…

We need this application in order to optimize the way we … Yes, if…

We aim for performance, so we'd like to code this thing in C … Yes, if…

We want to open-source this really neat tool we created … Yes, if…

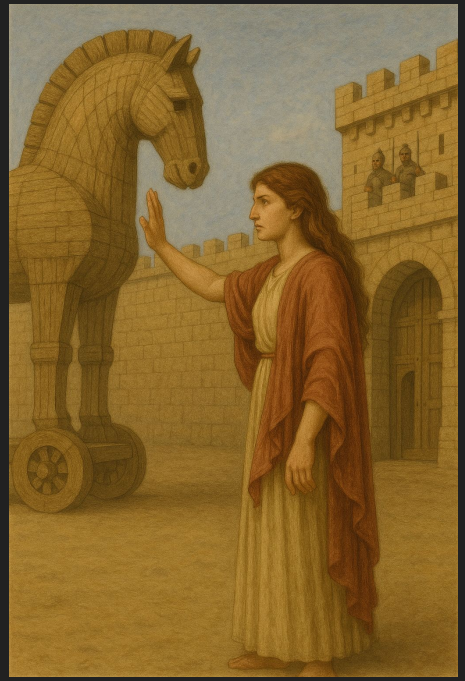
Bonus Content - Fear Works (but F.U.D. doesn't!)

- Risk Registry
  - A central repository for all identified risk that is currently unmitigated.
  - Fed and tended to by the appsec people.
  - Not a copy of the team's JIRA but may live there
- What do you do with it?
  - Appsec IDENTIFIES risk. The team OWNS the risk.
  - Follow up on timelines for risk mitigation
  - Make people SIGN for their risk. It does miracles!

Risk Registry - Example

- Teams with high/critical and reachable CVEs just refused to take the appropriate actions - “it breaks back compatibility!”, “we’ll need to refactor stuff!”
- One PoC to demonstrate the veracity of the finding
- “Who would do that to us?” - yes, I don’t have probabilities
- Risk identified is risk owned: please have your SVP sign here, and if something happens, we’ll know who to invite to the post-mortem with Leadership.
- Amazing work happens and components get patched.

Cassandra couldn’t stop the Trojan Horse …



…. but you just might.

- Be empathic without commiseration
- Be clear in your communication
- Be a partner, not a seagull
- Apply judicious amounts of fear

Thank you!

@izar.tarandach@infosec.exchange

@izar_t

https://bit.ly/3JsctcL