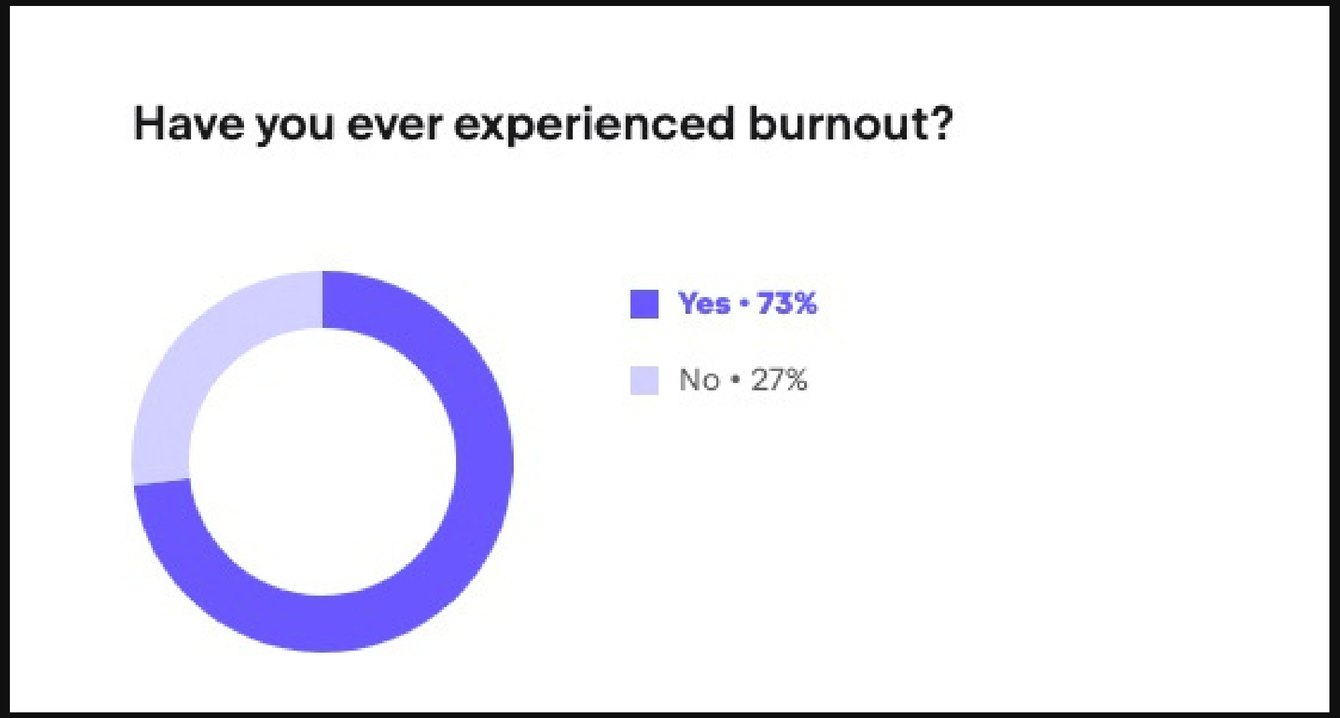
Being a developer is an inherently creative profession

“...industry experts agreed that being creative is an essential problem solving skill, vital to succeed as a software developer.”

Exploring the Role of Creativity in Software Engineering, 2021
https://sci-hub.se/https://ieeexplore.ieee.org/abstract/document/9402210

“I don't know. I guess i've never really thought of myself in that way”

-Adam Rackis, Spotify @AdamRackis



The State of Developer Ecosystem 2023
https://www.jetbrains.com/lp/devecosystem-2023/

DECREASED CODE QUALITY

STRESS/ANXIETY

low motivation

difficult decision making

LOW COGNITIVE PERFORMANCE

work withdrawl

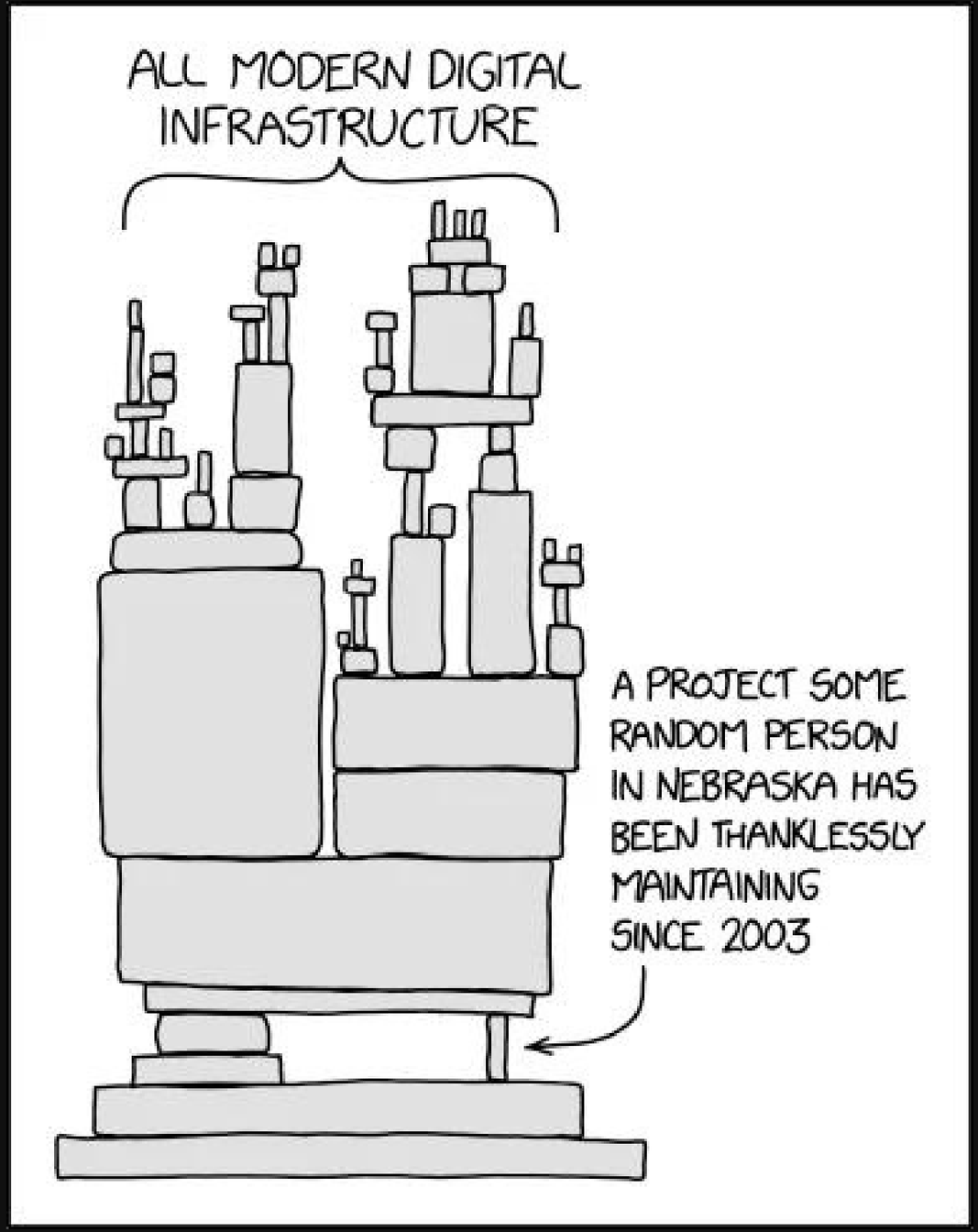
low productivity

TAKING SHORT CUTS

What happens when software developers are (un)happy, 2018
https://pdf.sciencedirectassets.com/271629/1-s2.0-S0164121218X0003X/1-s2.0-S0164121218300323/main.pdf

How can we define creativity for developers?

NEW FEATURE
DEVELOPER
NEW FEATURE
MY SPRINT OF BUG TICKETS
DEVELOPER
imgflip.com


ALL MODERN DIGITAL INFRASTRUCTURE
A PROJECT SOME RANDOM PERSON IN NEBRASKA HAS BEEN THANKLESSLY MAINTAINING SINCE 2003

“...applying novel and innovative
solutions based on understanding the context and limitations of existing solutions.”

Exploring the Role of Creativity in Software Engineering, 2021
https://sci-hub.se/https://ieeexplore.ieee.org/abstract/document/9402210

“(ITS) EXPERIMENT(ING) WITH NEW APPROACHES AND COME UP WITH INNOVATIVE SOLUTIONS.”

- April Wensel, Compassionate Coding

“if you're creating and layering abstractions up from nothing, toward something—then you are by definition a creative developer”

- XH, mmm.page

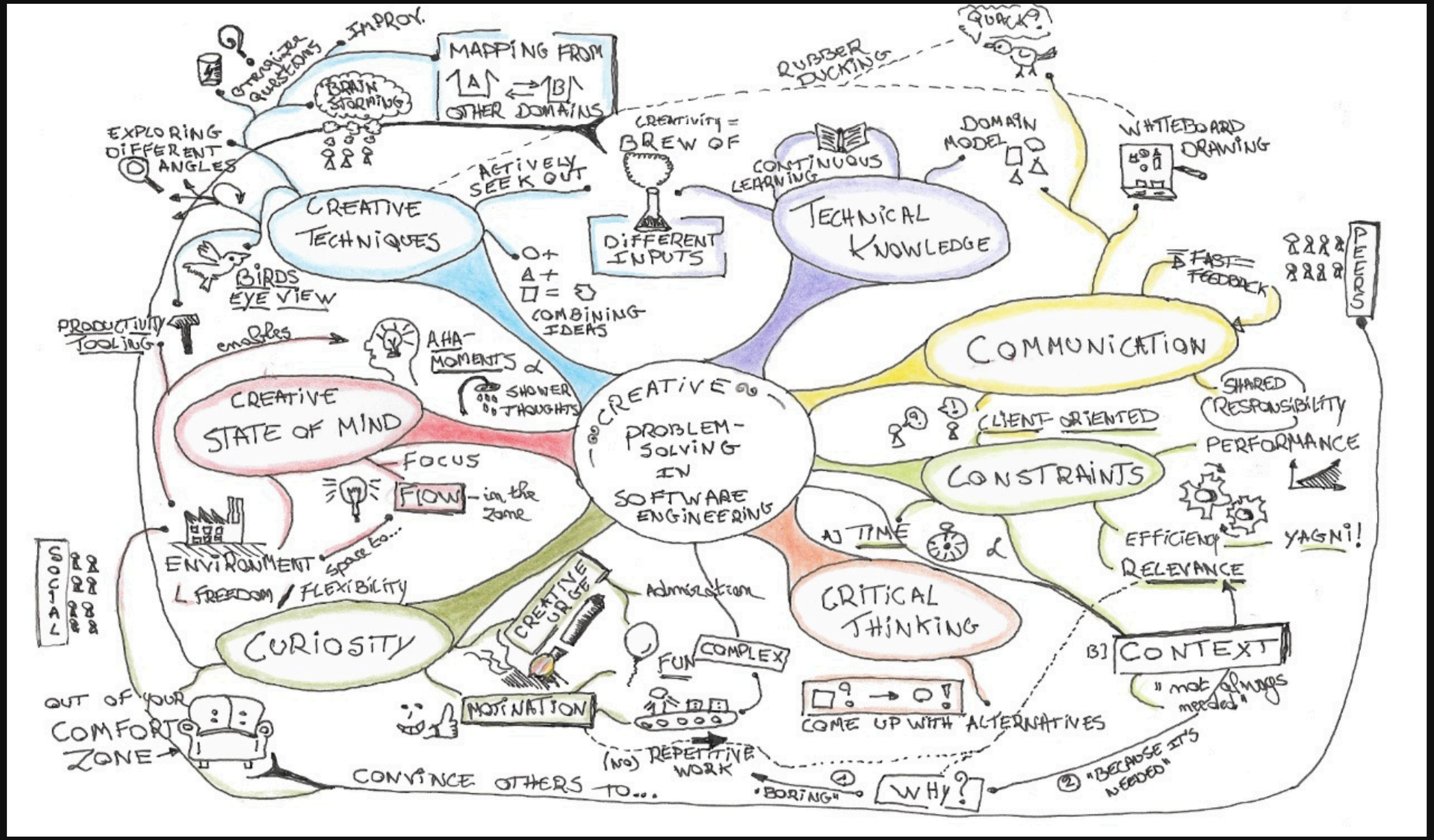
“...AN ENTHUSIASM ENTHUSIAST, WHO IS CONSTANTLY NOTICING WHY THINGS DO OR DO NOT WORK...“

- XH, mmm.page

“...having the ability to work around solutions with inquisitiveness and curiosity. Having the freedom to **think outside the box...**”

-Ale Thomas, Mui

How to make it actionable



Exploring the Role of Creativity in Software Engineering, 2021
https://sci-hub.se/https://ieeexplore.ieee.org/abstract/document/9402210

PERSONAL GROWTH

build stuff!

take courses

read blogs

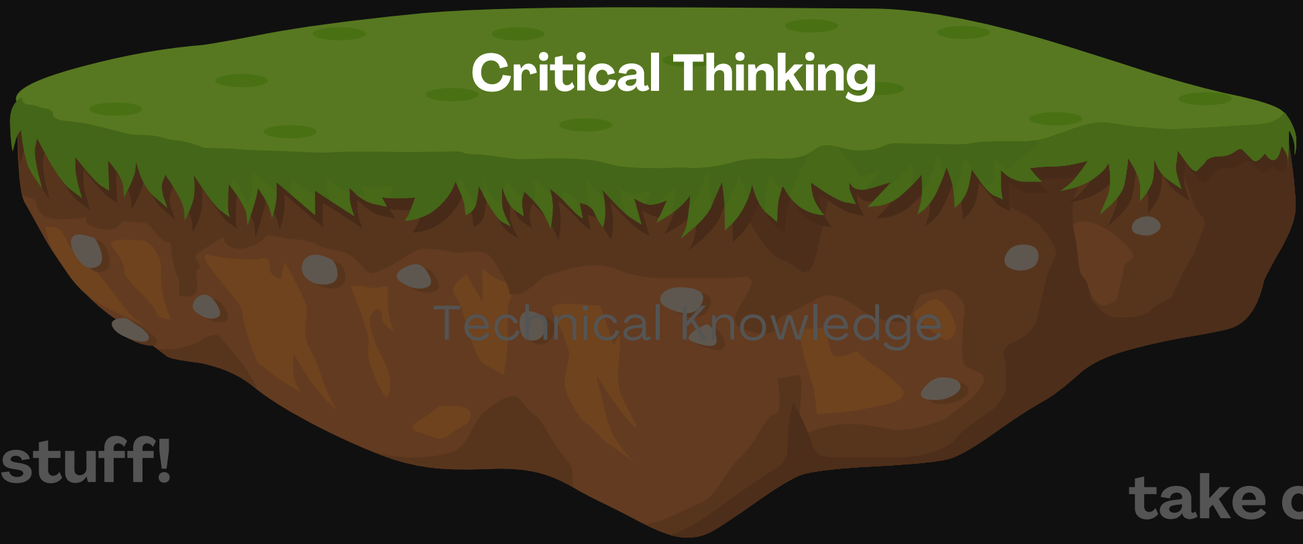
watch videos

PERSONAL GROWTH

putting it all together

different angles

risk assesment



build stuff!

take courses

read blogs

watch videos

PERSONAL GROWTH

Creative State of Mind

- shower thoughts
- flow state

Creative Techniques

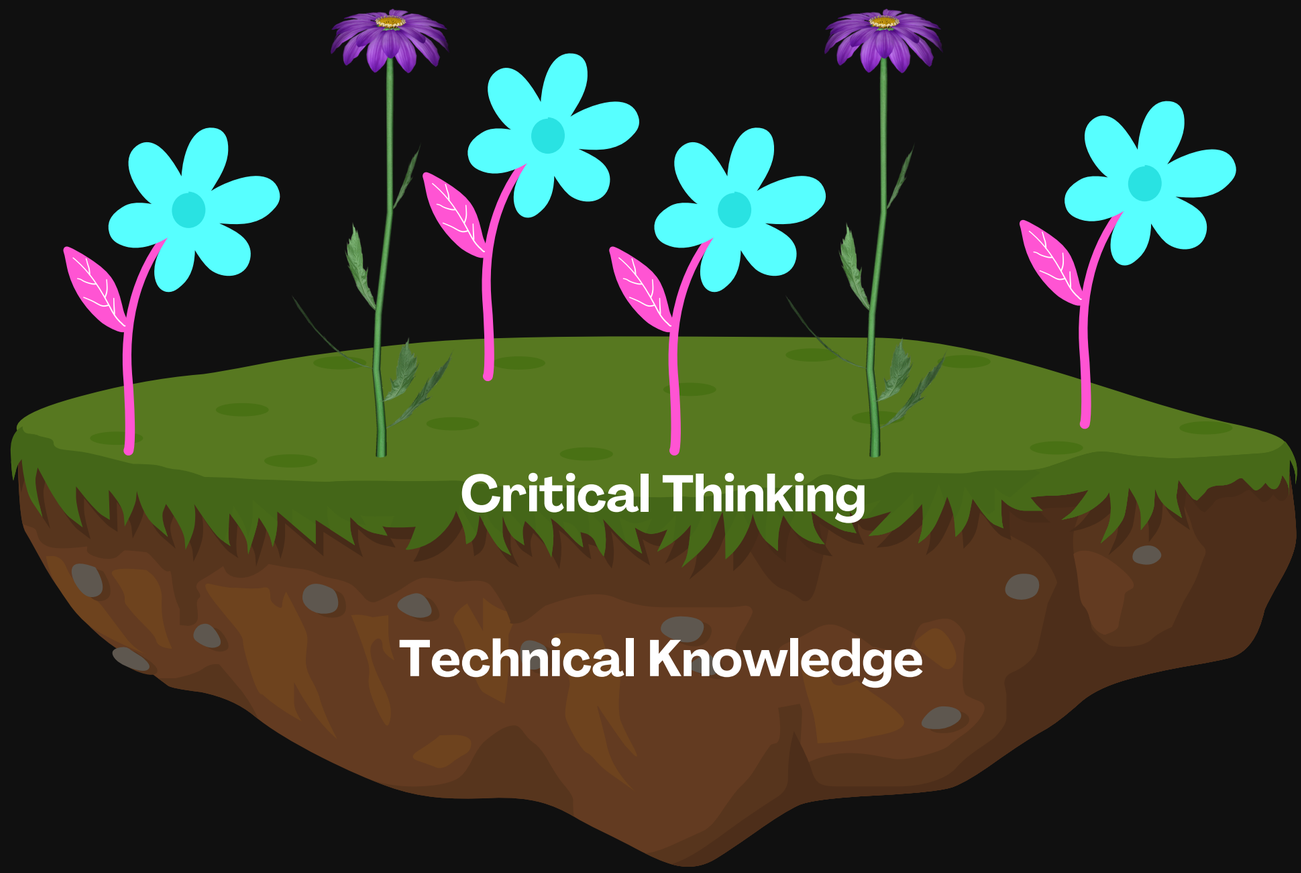
- exploring alternatives
- zoom out/zoom in approach

Curiosity

- seek out new ideas and experiences
- build for fun (hackathon, side project)

Communication

- whiteboarding
- debating



“being able to draw analogous thinking from various disciplines (for me: architecture, writing, music and visual media). Being moved by the devotion and ingenuity of other people”

- XH, mmm.page

“I ALSO SPEND TIME IN NATURE AND MEDITATING, WHICH CLEARS MY MIND SO IDEAS HAVE SPACE TO BLOSSOM”

- April Wensel, Compassionate Coding

“Most of my creative side stems from my love of music. I feel tech and music have a lot of similar qualities to them.”

-J.D., Garmin

“MY INSPIRATION COMES FROM WATCHING OTHERS BUILDING IN PUBLIC”

-Brian Douglas, Open Sauced

EXTERNAL FACTORS

Constraints

Neutral

- The boundaries of the problem
- The user population you serve
- Time
- The tools you have to build

EXTERNAL FACTORS

Constraints

“We have an entire design system that we can't really break out of.
But it's run by committee so if changes need to be made,
we need to run them by the committee first” -J.D.

EXTERNAL FACTORS

Constraints

Negative

- Low trust environment
- Failing is punished
- Lack of direction
- Micro-management
- Poor environment to focus
- Organizational chaos

Encourage a more "open door" system, where people across teams can collaborate, help each other, and feel comfortable sharing their opinions and asking for help.

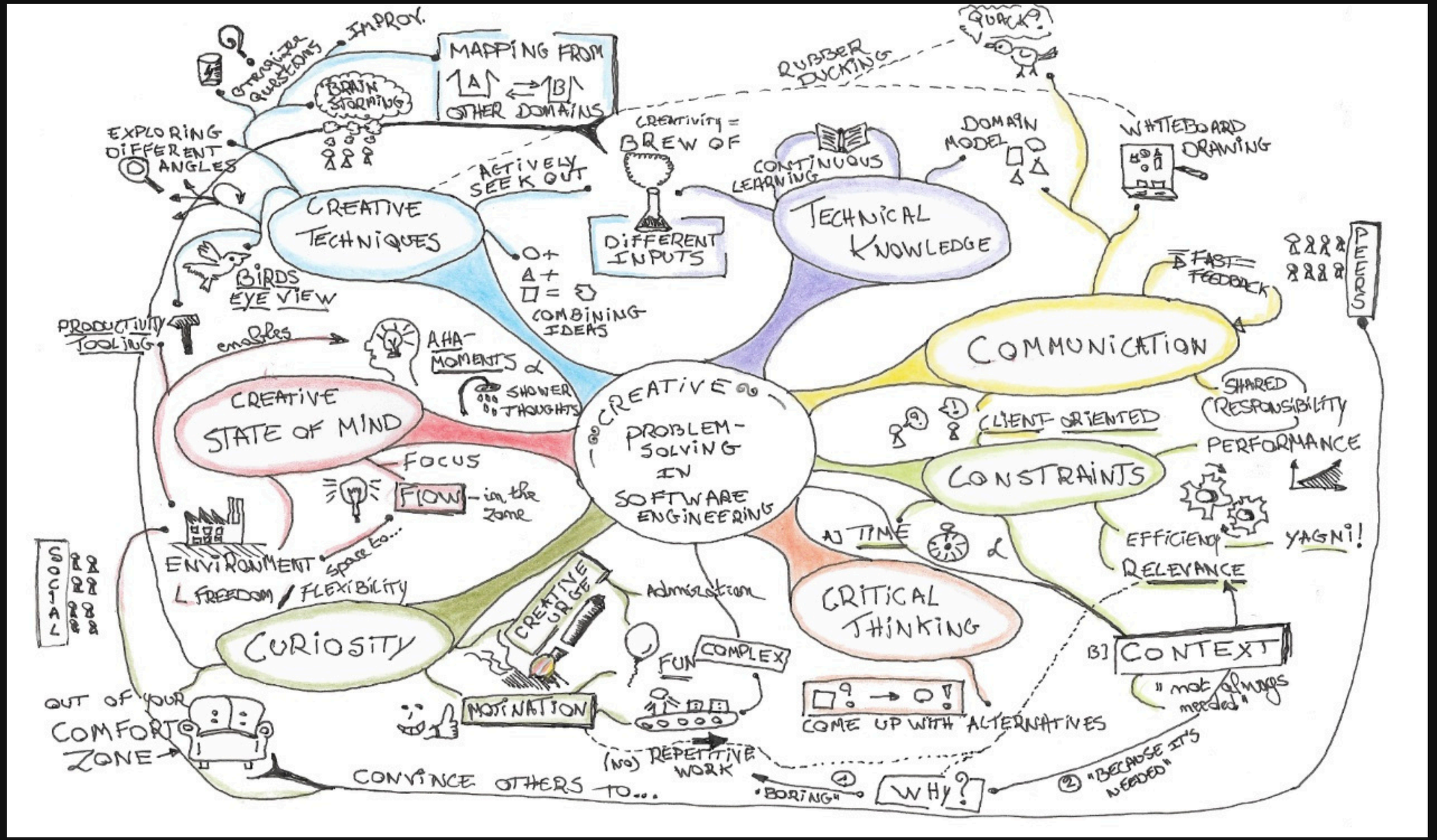
- Ale Thomas, Mui

“LEADERSHIP IS LEAVING THINGS BETTER THAN HOW YOU FOUND. PROVIDING CONTEXT IN ISSUES AND PRS”

- Brian Douglas, Open Sauced

“...hire the right people who are willing and eager to sort of try different things out and just sort of give them space to do that.”

- Adam Rackis, Spotify



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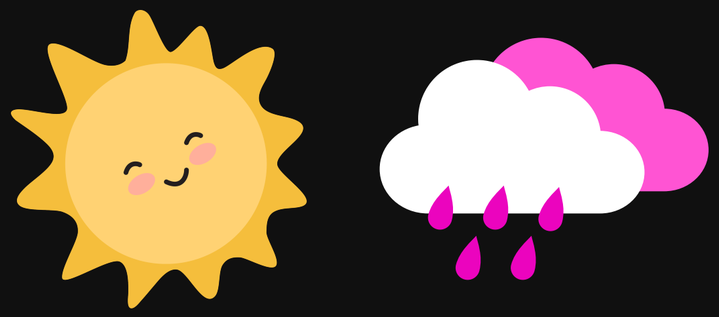
External Forces

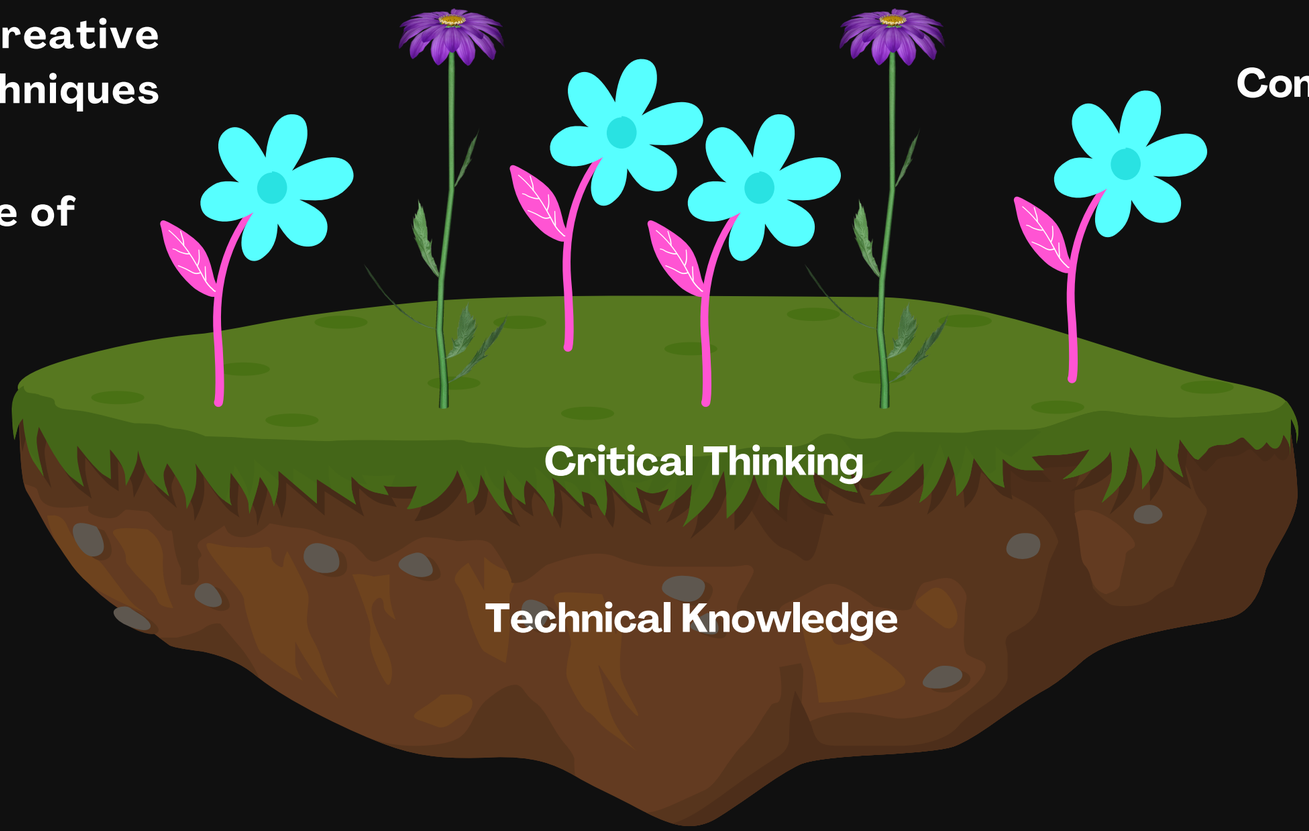
Constraints



Personal Growth

Creative Techniques

Creative State of Mind



Communication

Curiosity

Critical Thinking

Technical Knowledge

connect with me

Be inspired and build cool stuff.