



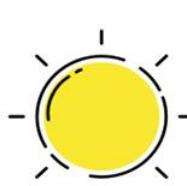
Integrating visual communication and storytelling in Software Engineering



Vaishnavi V
Solutions Architect | Code Wrangler



HOW YOU DOIN'



HAPPY



OKAY



MEH



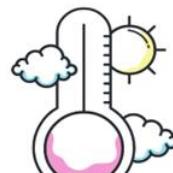
WHERE'S MY
COFFEE



YAWN



SNOOZE

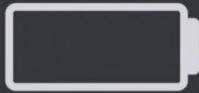


THIRSTY



HUNGRY

WARNING



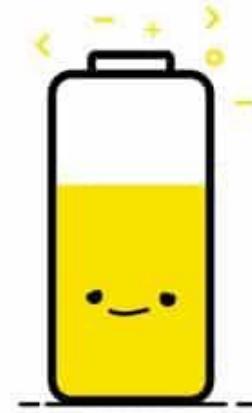
SOCIAL BATTERY LOW



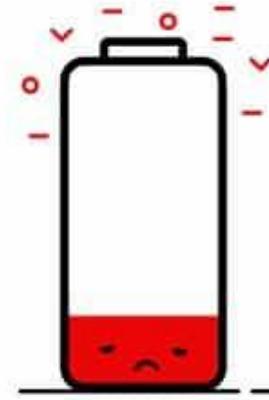
GOOD DAY CHARGE



GETTING READY



TRAVEL TO EVENT

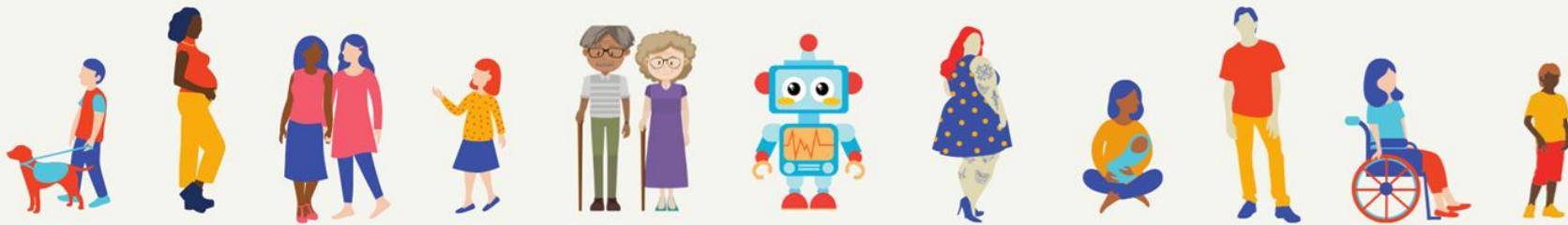
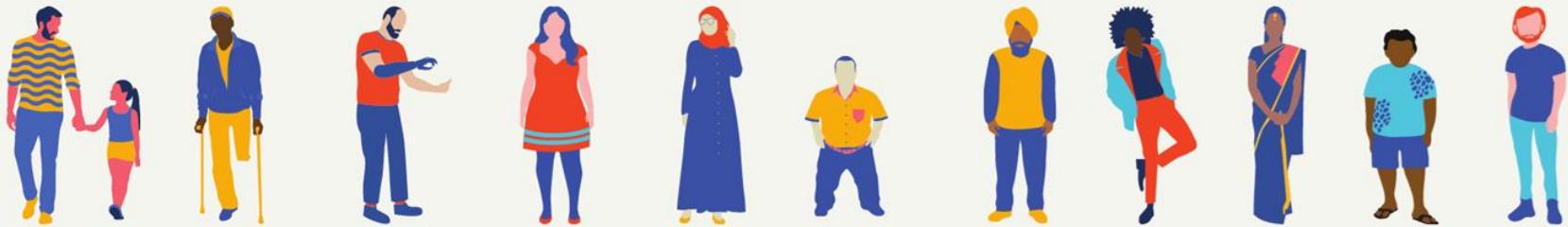


1 - 3 HOURS BEING OUT



TRAVEL HOME

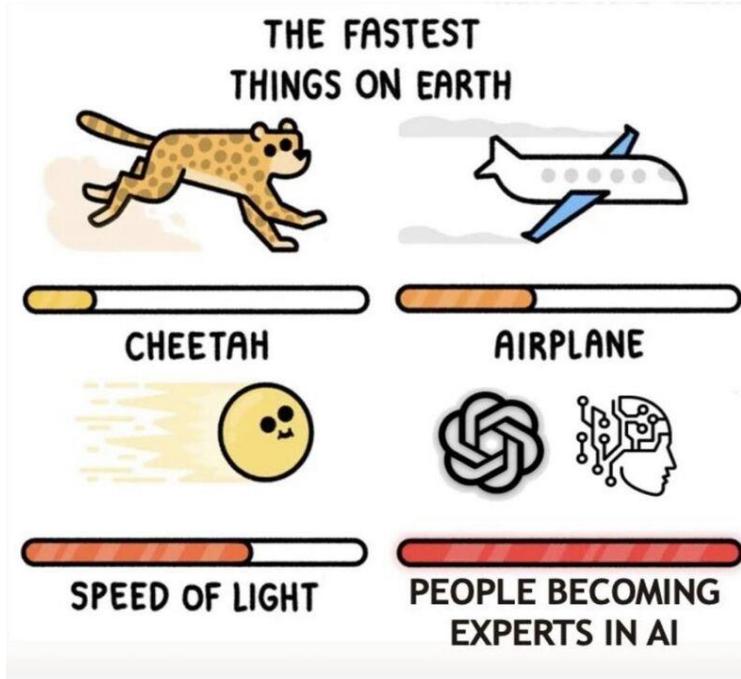




Disclaimer



Not an expert!



Glossophobia

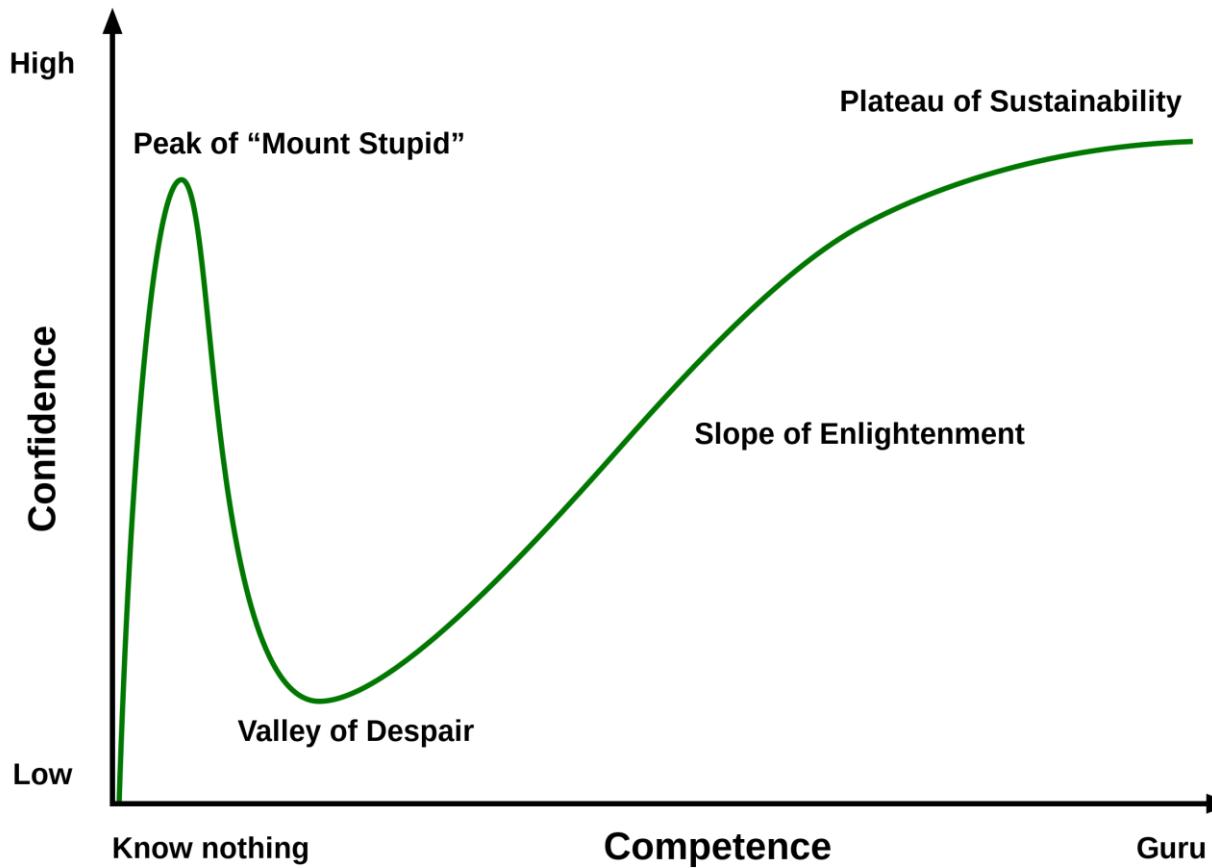




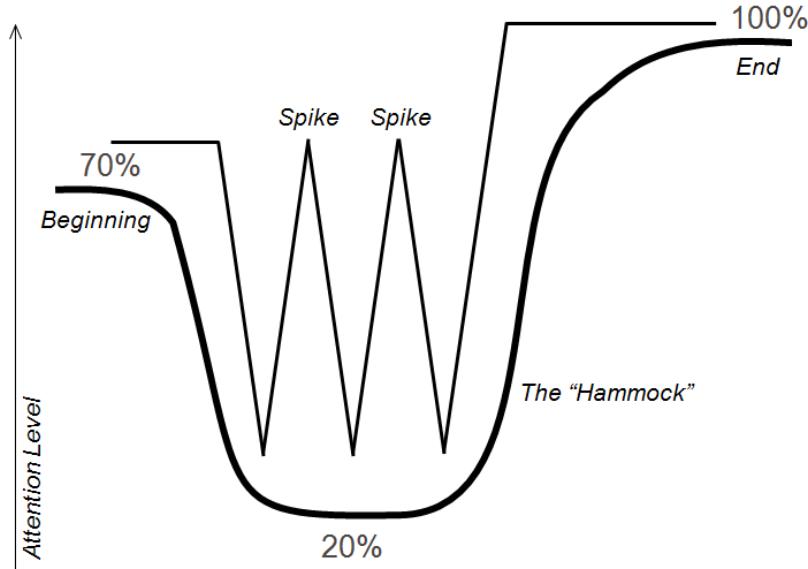
**Presentation is auto
biographical –
Sample size of 1**

No spandex required!

Dunning–Kruger Effect

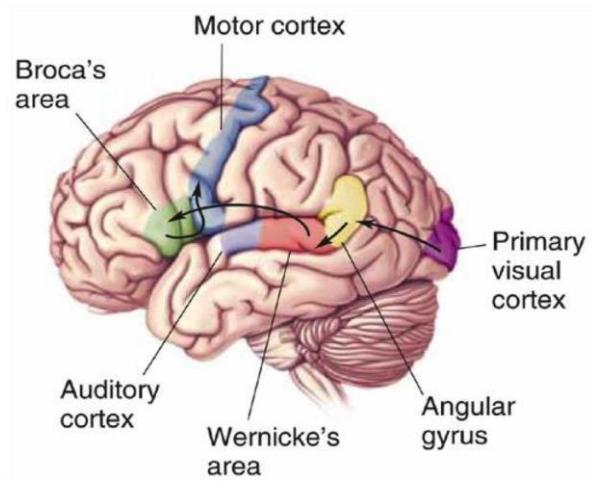


Human attention : The Hammock and the Spikes



Source : Keeping the Audience Engaged with Presentation “Spikes”

Visual information vs reading words

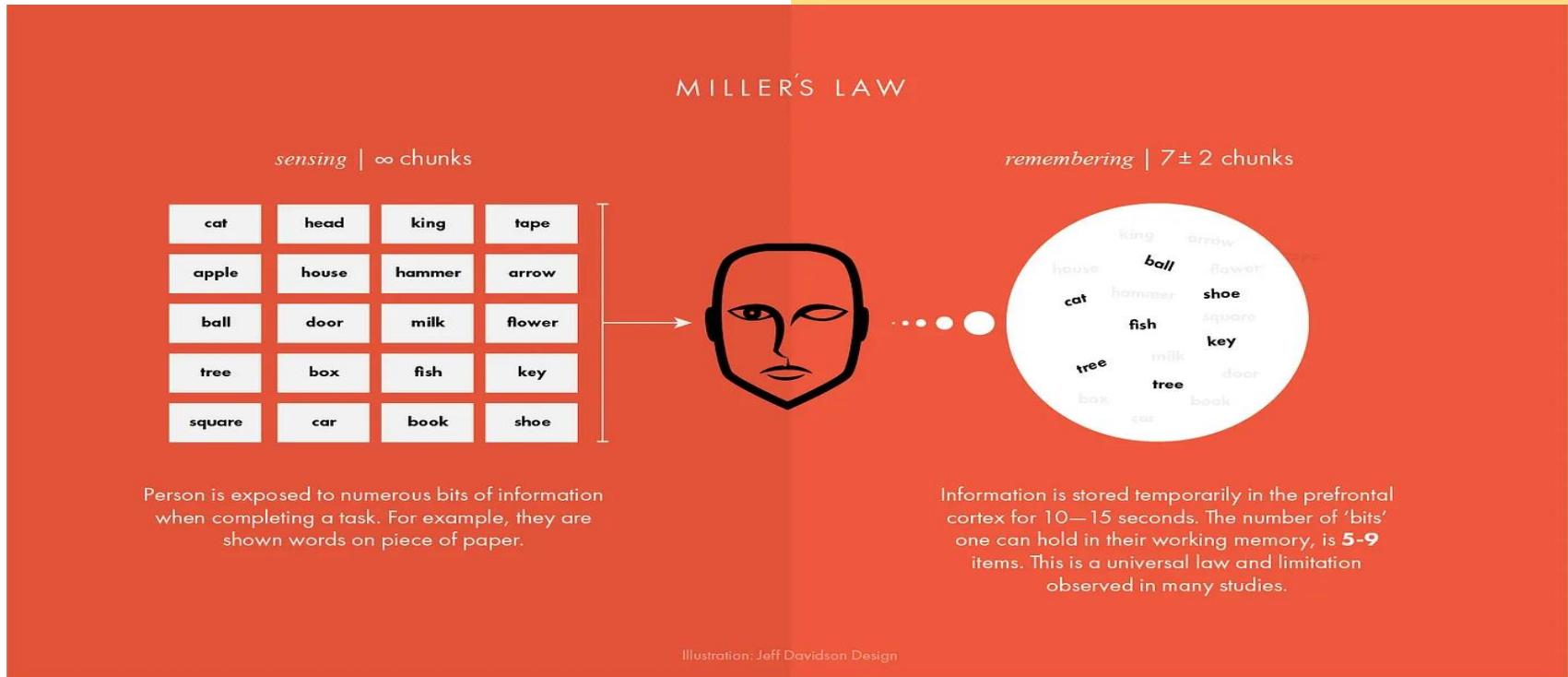


MILLER'S LAW



Illustration: Jeff Davidson Design

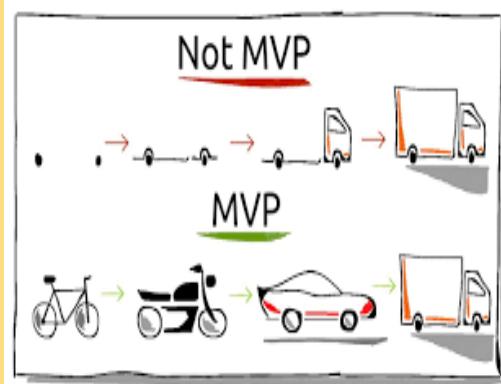
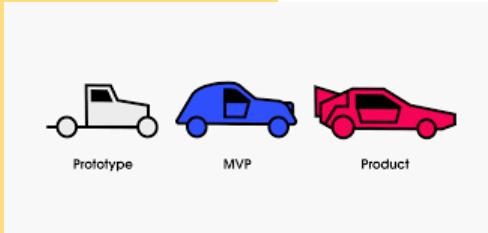
George Miller's Magical Number of Immediate Memory



Definition



Visual communication is the practice of using visual elements to get a message across, inspire change, or evoke an emotion.



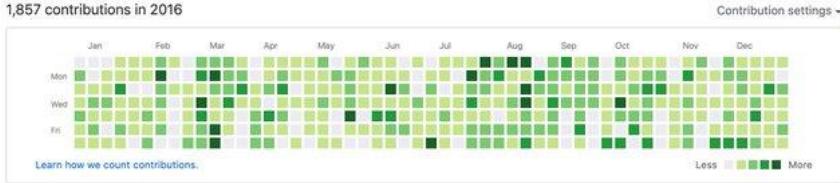
Perfect MVP

- Communication design refers to crafting a message that educates, motivates, and engages the viewer.
- Graphic design uses design principles to communicate that message in a way that is clear and eye-catching to the intended audience.

Z73.0

Visualizing burnout

1,857 contributions in 2016



1,673 contributions in 2017



1,224 contributions in 2018

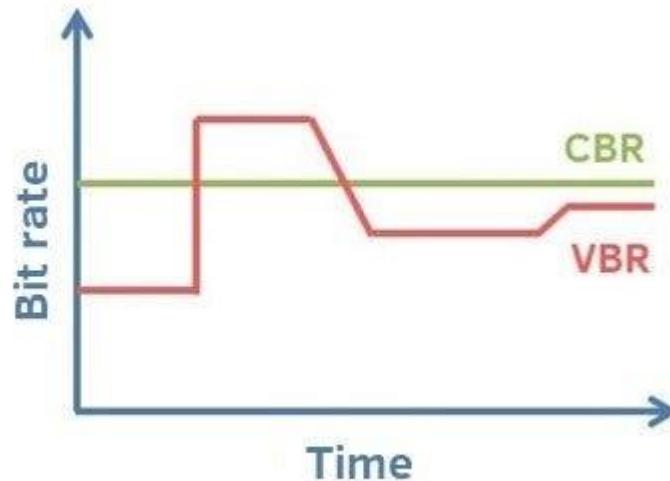


287 contributions in the last year



Credits : [Jonnie Hallman](#)

Crest and trough



Tell, Don't Ask

In case of fire



1. git commit

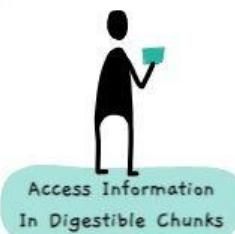
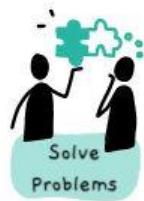
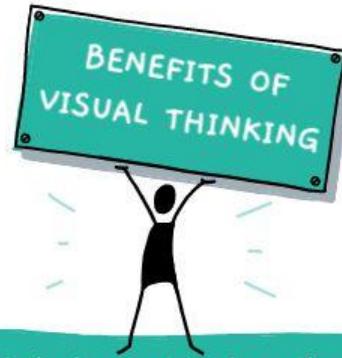
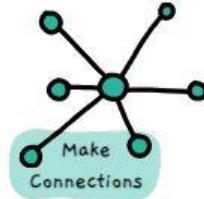


2. git push



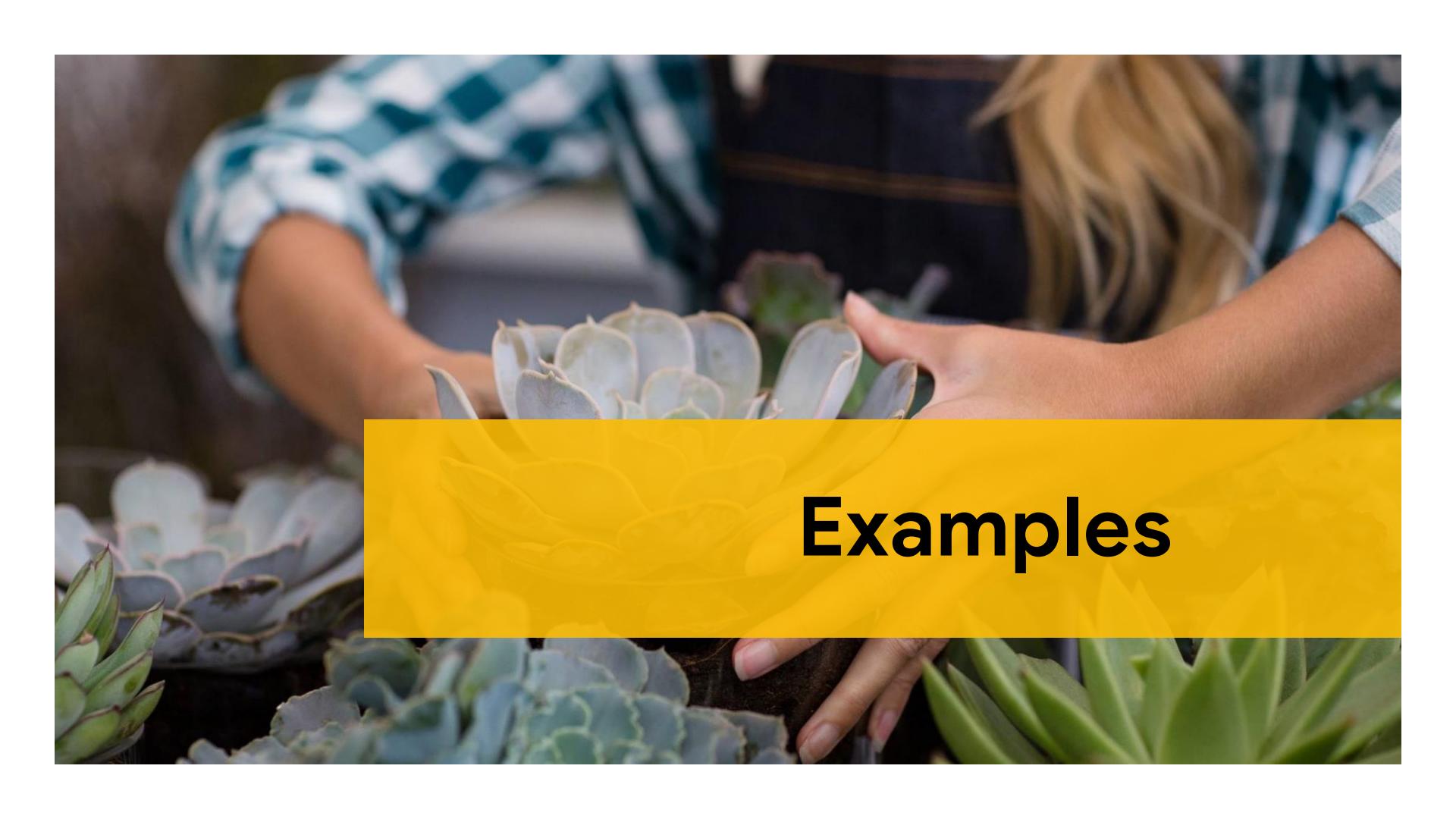
3. leave building

- “Programs must be written for people to read, and only incidentally for machines to execute” (SICP)*



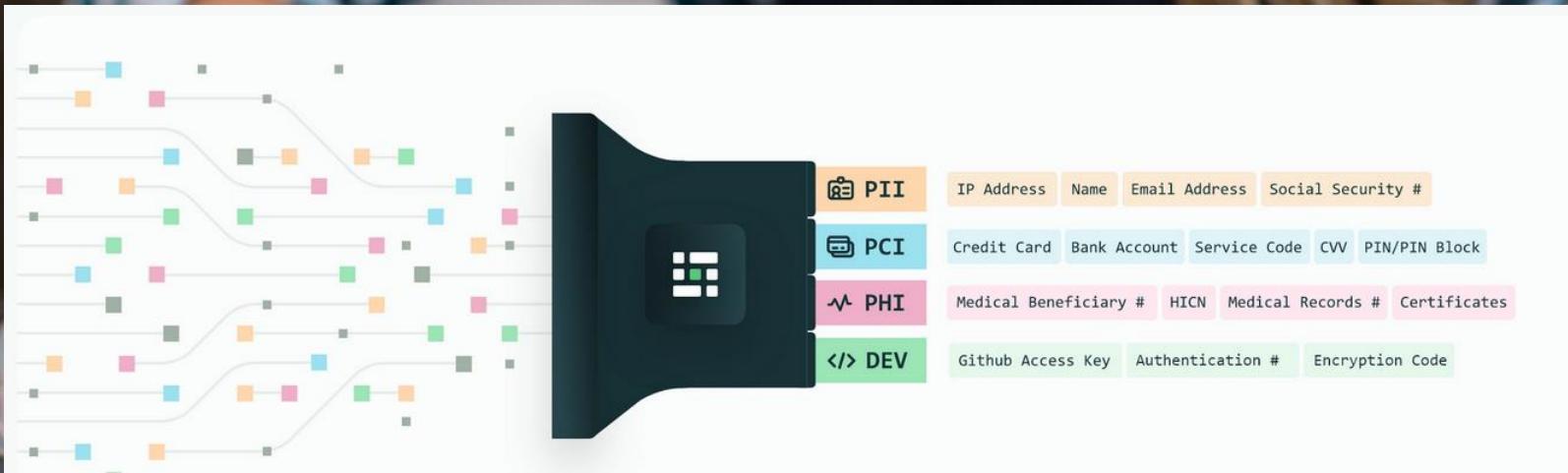
Visual thinking externalizes thinking so you and others can "see what you mean." This allows you to:



A close-up photograph of a person's hands reaching towards a cluster of succulent plants. The person is wearing a blue and white checkered shirt. The background is blurred, focusing on the green, spiky leaves of the succulents. A large yellow rectangular overlay covers the middle portion of the image, containing the word "Examples".

Examples

PrivaC y

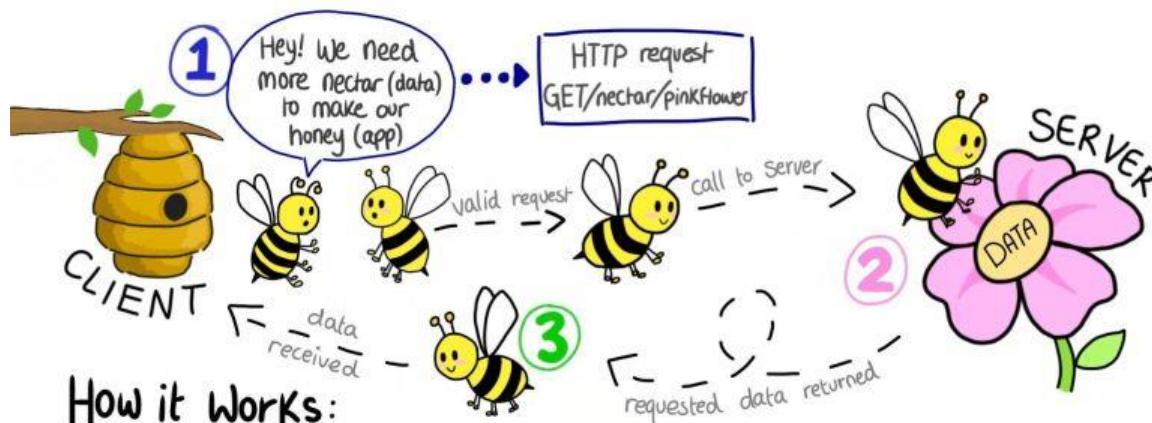


Source : Medium blog

What is an API ?

@Rapid_API 

An application programming interface allows two programs to communicate. On the web, APIs sit between an application and a web server, and facilitate the transfer of data.



How it Works:

1 Request

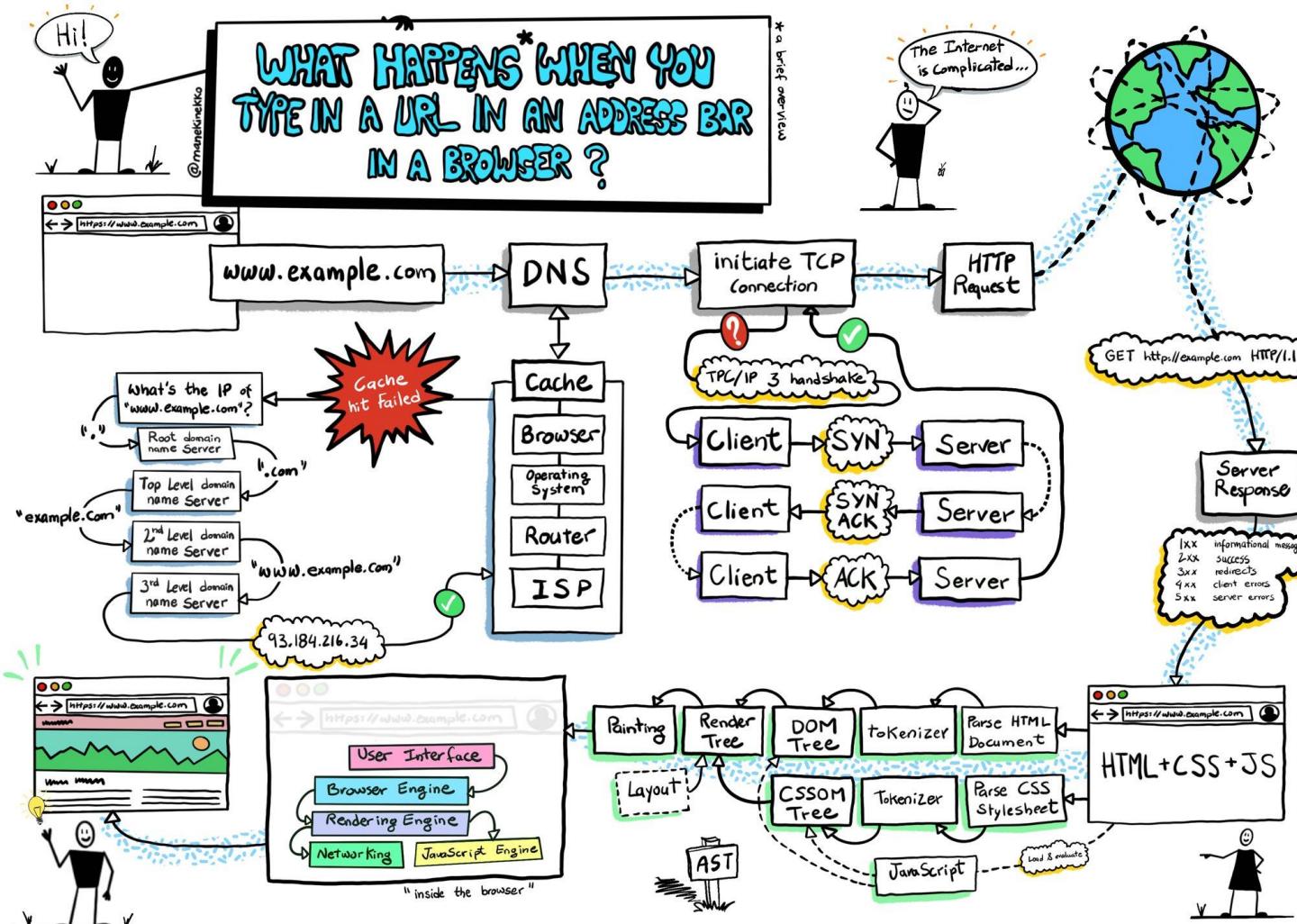
API call is initiated by the Client application via a HTTP request

2 Receive

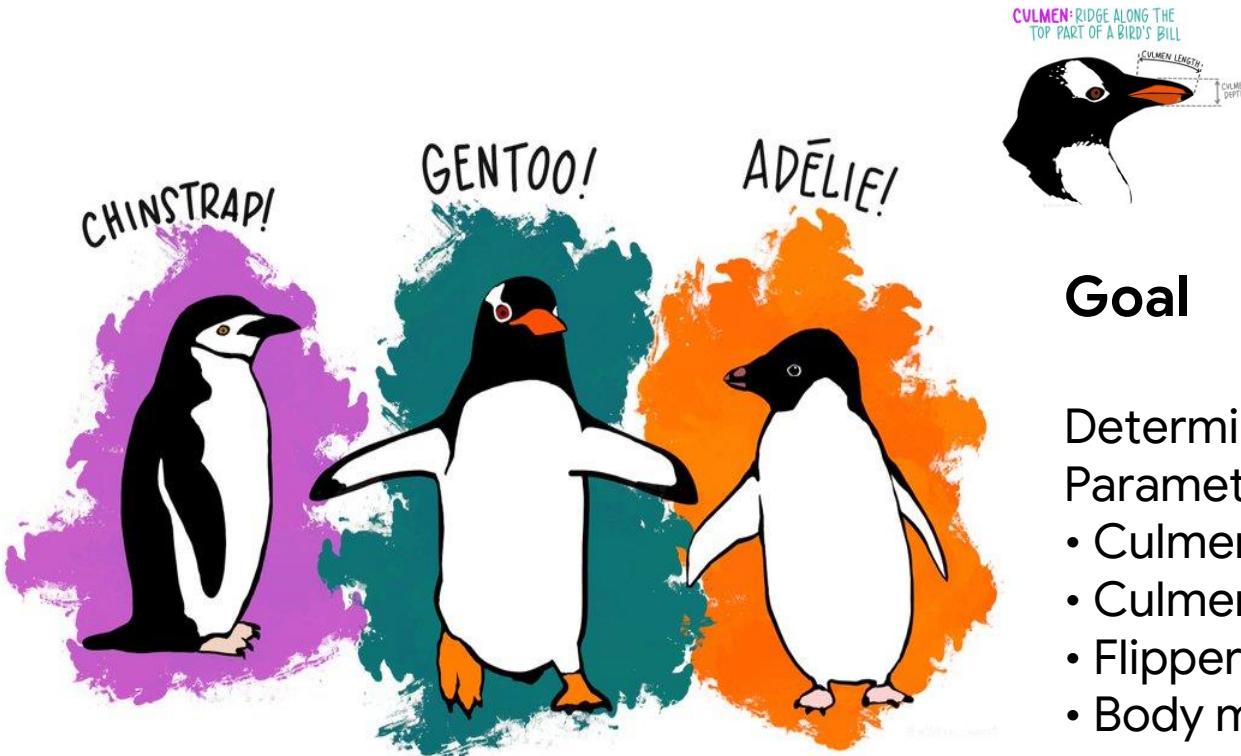
Our worker bee acts as an API, going to a flower (server) to collect nectar (data)

3 Response

The API transfers the requested data back to the requesting application, usually in JSON format



Penguin Dataset



Goal

Determine the species of a penguin

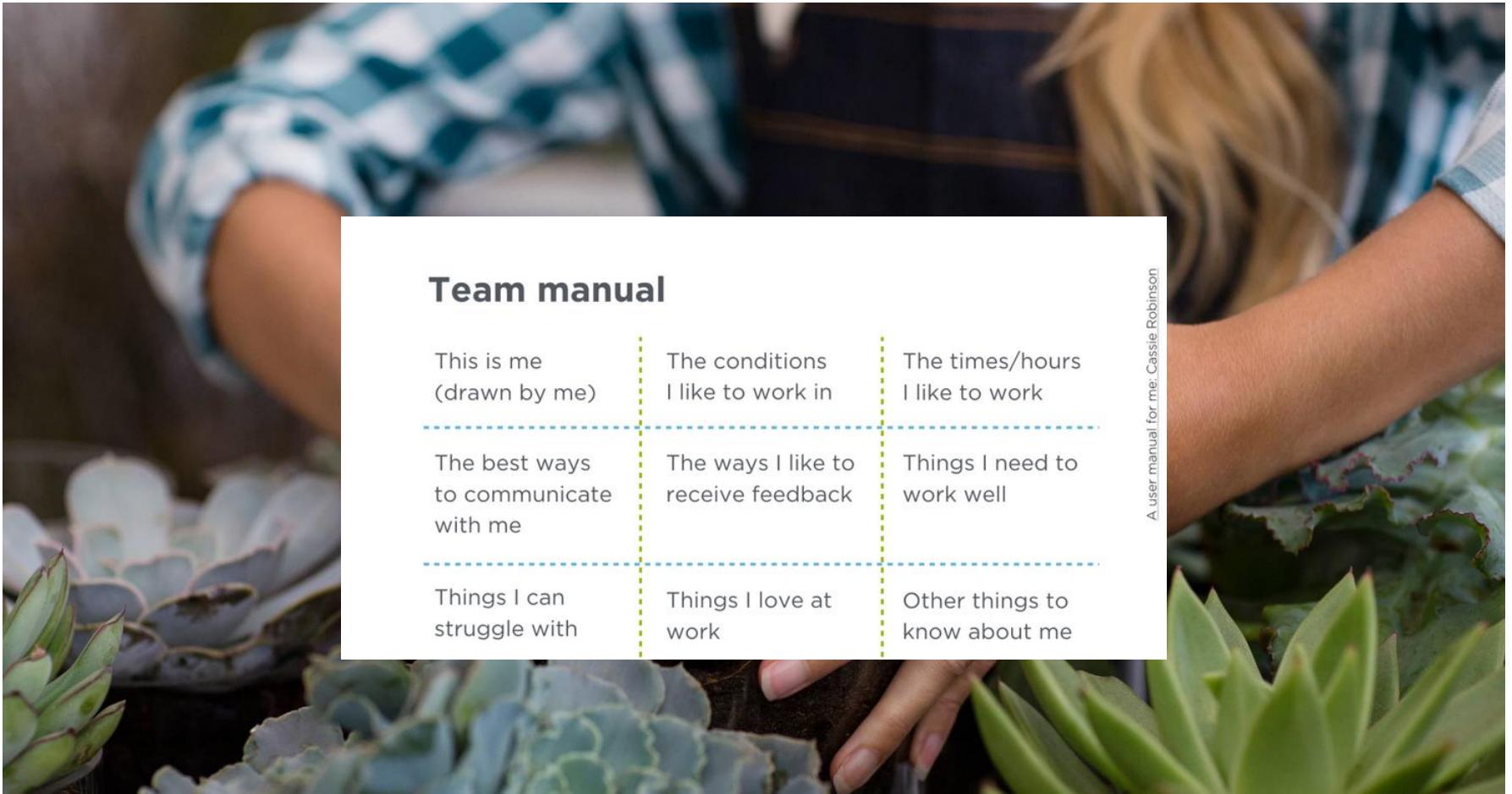
Parameters :

- Culmen length
- Culmen depth
- Flipper length
- Body mass

A close-up photograph of a person's hands reaching towards a cluster of light green, spiky succulents. The person is wearing a blue and white checkered shirt. The background is blurred.

Manual Of Me





Team manual

This is me
(drawn by me)

The conditions
I like to work in

The times/hours
I like to work

The best ways
to communicate
with me

The ways I like to
receive feedback

Things I need to
work well

Things I can
struggle with

Things I love at
work

Other things to
know about me

A user manual for me: Cassie Robinson

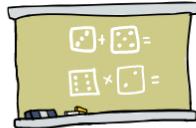
Hello,
I'm Vaishnavi



Vancouver



Things I ❤️



Teaching



Public Speaking



Visual Communication

Things I do 🎨



Software Engineering



Ideation



Team collaboration

How to Give Me Feedback 💬

Direct constructive feedback provided with utmost honesty to help me grow.
Data driven and candid conversations with potential solutions for me to thrive and succeed.

Comms Preferences 📱



Working Patterns ☀️



- Morning Person
- Enjoy a quiet and vibrant environment
- Follow Pomodoro Technique 🍅

Things I struggle with 🤪



Mickey Mouse Job
#halfbaked



Yak Shaving



Interruptions

“Simple things should be simple,
complex things should be possible.” - Alan Kay

P.S: No animals or disney characters were harmed in the making of this manual





MISSION

302 🚀 Mission Found

Empower marginalized community through the power of technology, story telling and visual communication one person, one story, one visual at a time.



101 ✅ Switching Protocol
426 ✨ Upgrade Required



WARNING

406 ⚠️ Not Acceptable
504 ⏱ Gateway Timeout

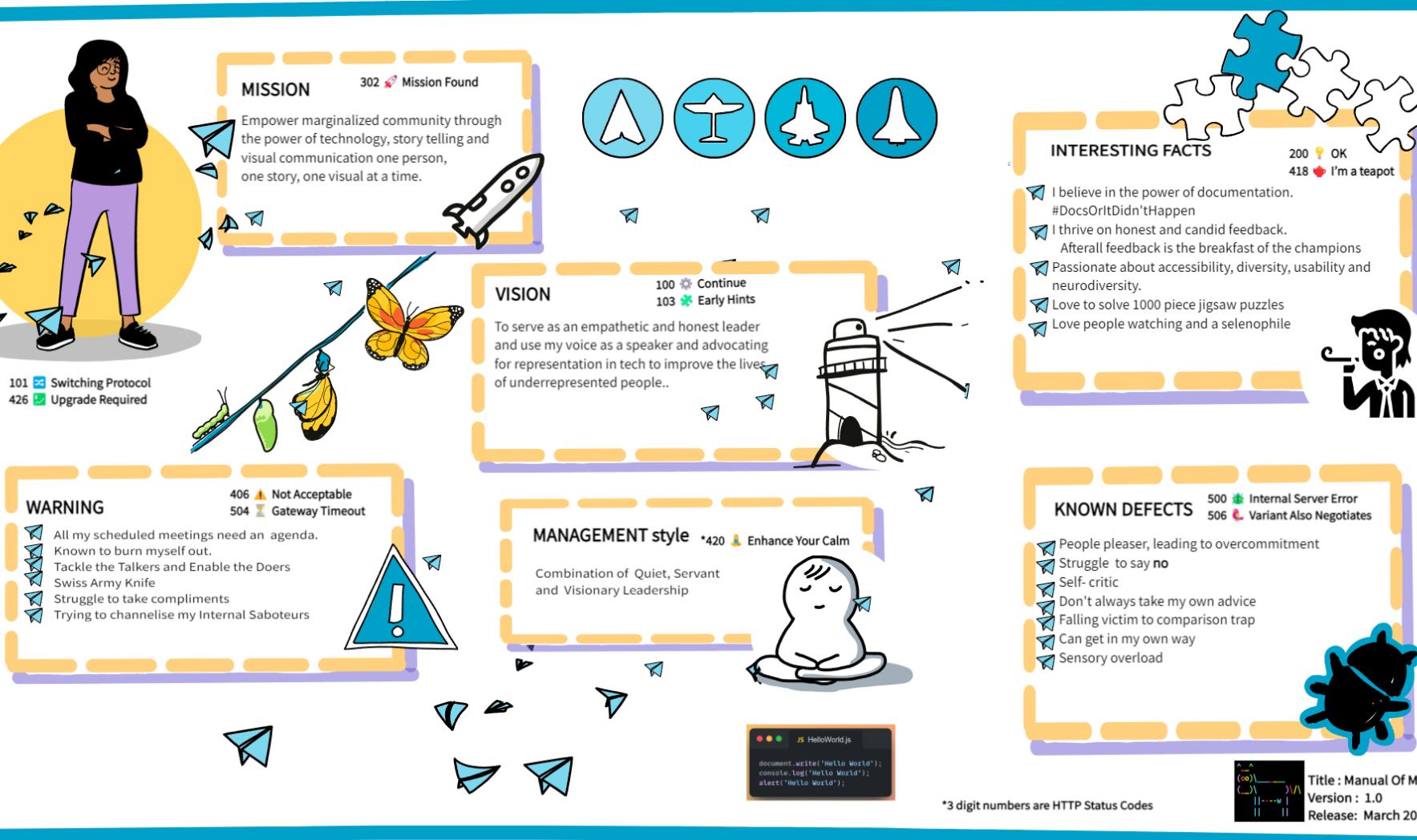
- All my scheduled meetings need an agenda.
- Known to burn myself out.
- Tackle the Talkers and Enable the Doers
- Swiss Army Knife
- Struggle to take compliments
- Trying to channelise my Internal Saboteurs

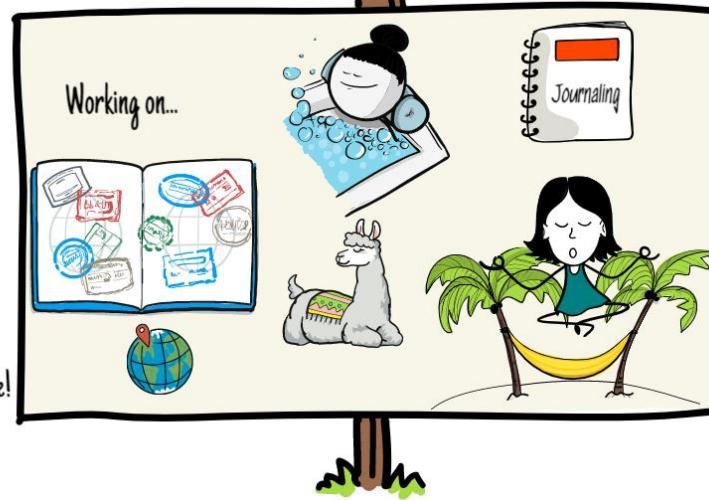


VISION

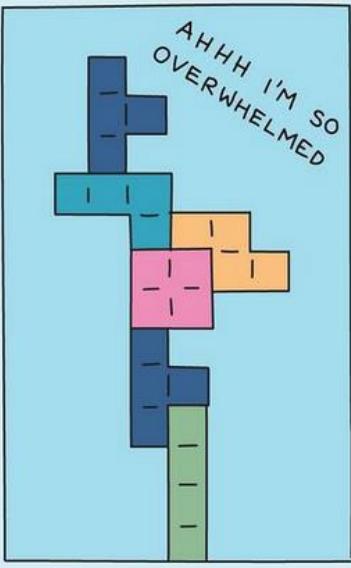
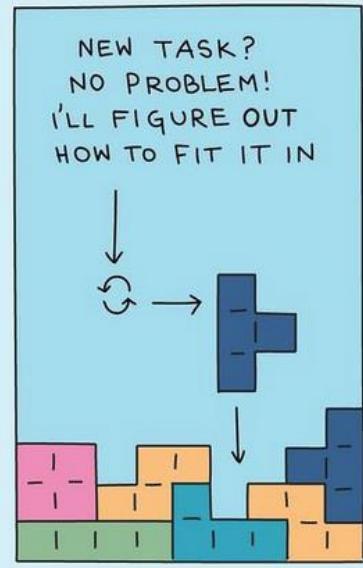
100 🌐 Continue
103 ✨ Early Hints

To serve as an empathetic and honest leader and use my voice as a speaker and advocating for representation in tech to improve the lives of underrepresented people..





Ideas

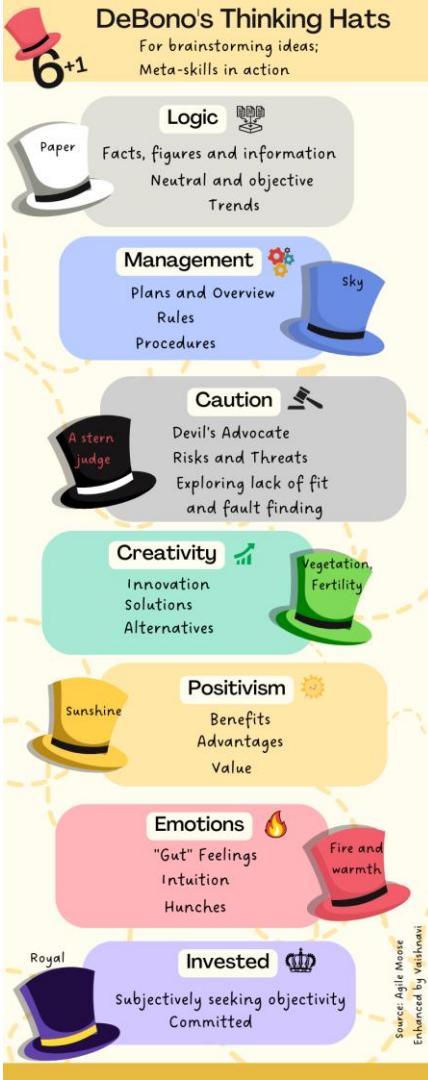


Take a break!

```
import time

def pomodoro_timer(minutes):
    for i in range(minutes * 60, 0, -1):
        print(f"Time remaining: {i//60}:{i%60:02d}", end="\r")
        time.sleep(1)
    print("Time's up!")
```





Resources

[Plant UML](#)

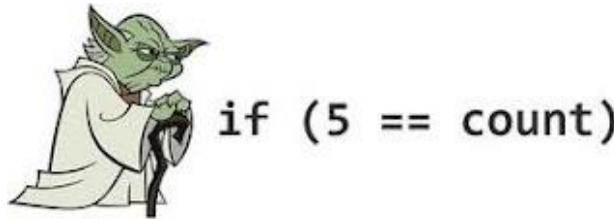
Programmer Jargon

Pokémon Exception Handling



For when you just Gotta Catch 'Em All.

```
try {  
}  
catch (Exception ex) {  
    // Gotcha!  
}
```



`if (5 == count)`



Heisenbug (n):

A software bug that disappears or alters its behavior when one attempts to probe or isolate it.

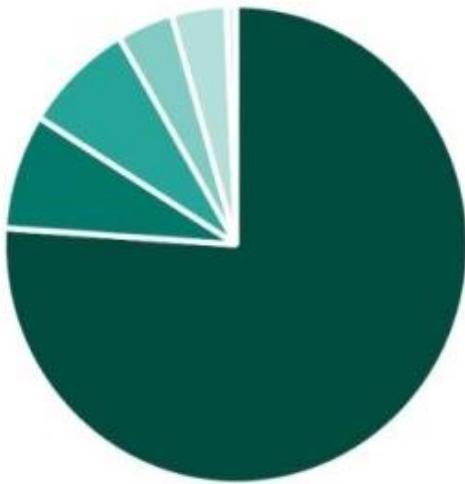
The Jargon File



A close-up photograph of a person's hands reaching towards a large, light green succulent plant with thick, rounded leaves. The background is blurred, showing more of the plant and a person wearing a blue and white checkered shirt.

Precaution

🚫 Overwhelming the user!



- White, 76.1%
- Hispanic or Latino, 7.8%
- Asian, 7.7%
- Unknown, 3.9%
- Black or African American, 3.8%
- American Indian and Alaska Native, 0.7%

Clutter



Copyright: .marqs / photocase.com

Colors alone

Inaccessible



| Course # | Name |
|----------------|----------------------------|
| Algo 101 | Introduction to Algorithms |
| Networking 101 | Topology and Networking |
| Gardening 101 | Soil therapy for beginners |

Red-green color blind?

Colors alone!

| Course # | Name |
|----------------|----------------------------|
| Algo 101 | Introduction to Algorithms |
| Networking 101 | Topology and Networking |
| Gardening 101 | Gardening for beginners |

Alternate means of communication

Accessible Example ✓

| Course # | Name | Required |
|----------------|----------------------------|----------|
| Algo 101 | Introduction to Algorithms | Yes |
| Networking 101 | Topology and Networking | No |
| Gardening 101 | Gardening for beginners | No |

Misinterpretation or reading between the lines?

UN Women @UN_Women · Follow

EQUALITY

#GenerationEquality

1:39 PM · Jan 27, 2020

3.4K Reply Share

This tweet from UN Women features a grid of hand icons in various skin tones. The word "EQUALITY" is written in a bold, black font at the bottom right of the grid. The tweet includes the hashtag #GenerationEquality.

ALICE STANIFORD @Alice_Staniford · Follow

Replying to @UN_Women

EQUALITY

4:20 AM · Jan 28, 2020

This reply from Alice Staniford shows a grid of hand icons in various skin tones, identical to the one in the original tweet. The word "EQUALITY" is written in a bold, black font at the bottom right. The reply is directed at the UN Women account.

Deepfake technology: seeing is believing, or is it?



“Don’t tell me the moon is shining. Show
me the glint of light on broken glass.”
- Anton Checkhov



Memory & Cognition study - 2014

Expectation that one will need to teach
can enhance one's learning and
organization of knowledge.



**“Best times to start teaching
something is shortly after learning it”**



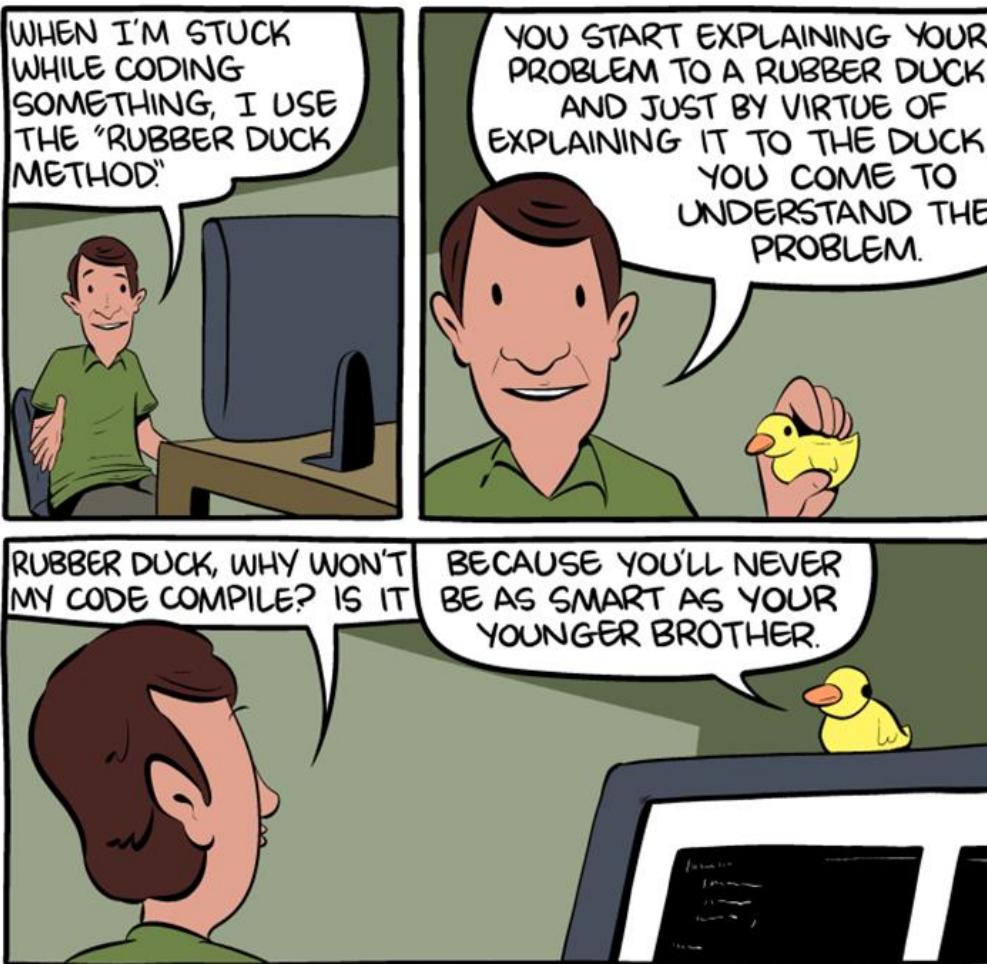


Cascading Mentorship Model

- Another form of teaching that utilizes the benefits of the protégé effect, while adding new benefits.
- Each student is providing mentorship to someone less experienced than them, and same goes for that person, and so on and so forth

- Everyone – even the most junior person – is involved in an active, peer-led exercise that empowers people on every level of experience to understand their own area of practice more deeply.
- They are also encouraged to practice their coaching skills, while also analyzing the coaching they receive in order to improve their own skills.





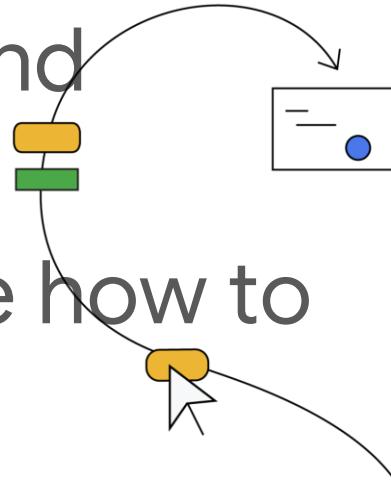
smbc-comics.com

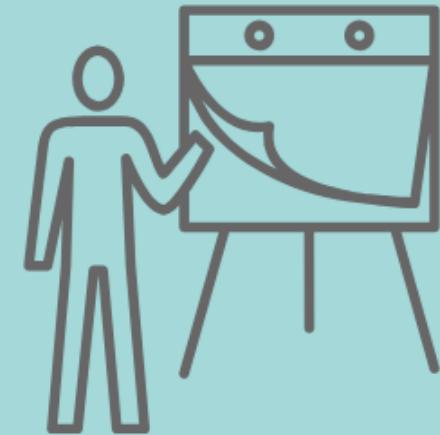
SODOTO

See one — See a procedure and observe how it's done.

Do one — Do the procedure and practice it.

Teach one — Teach someone else how to do the procedure.





“Publishing your work increases your luck”

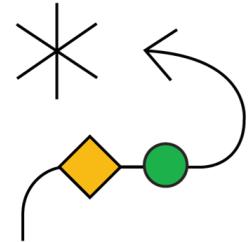


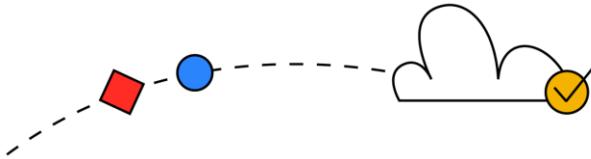
How can we increase the odds of finding luck?

- Luck is when something unexpected and good happens to you.
Unexpected and good. Who doesn't want to increase the odds of something unexpected and good?
- By being a person who works in public. By doing work and being public about it, you build a reputation for yourself.
- You build a track record. You build a public body of work that speaks on your behalf better than any resume ever could.

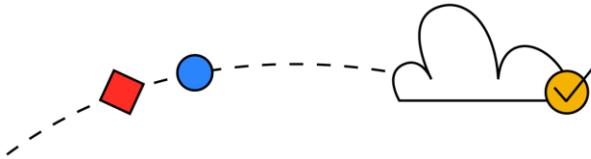
“Luck Surface Area”

– Jason Roberts





“The amount of serendipity that will occur in your life, your Luck Surface Area, is directly proportional to the degree to which you do something you’re passionate about combined with the total number of people to whom this is effectively communicated.”



Start Doing, Amplify with Telling!

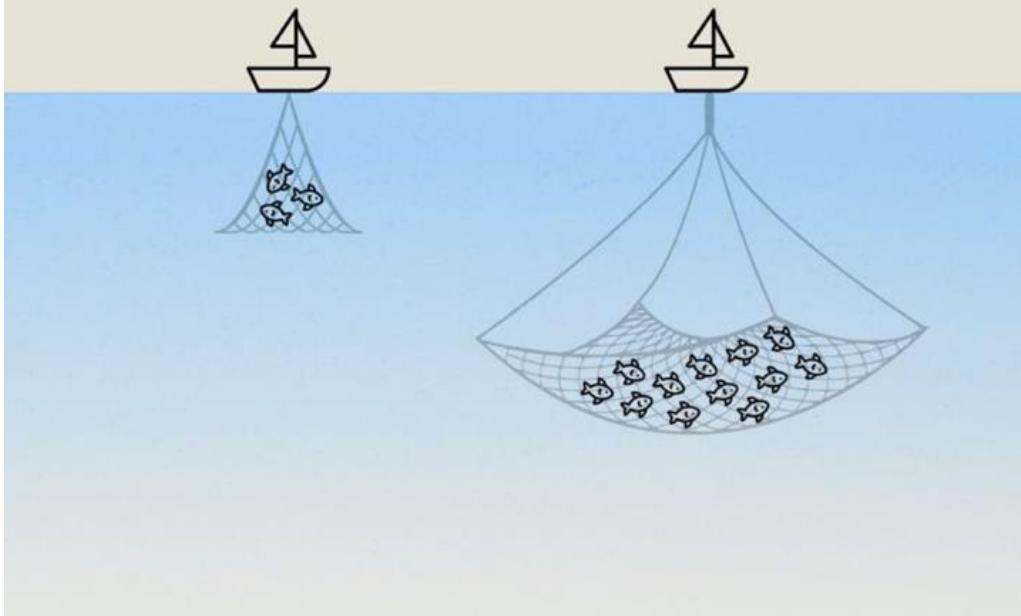
The goal is not to become famous, the goal is to increase the chances of luck finding us!

Luck = (Passionate) Doing x (Effective) Telling

The more things you do multiplied by the more people you tell, the larger your Luck Surface Area becomes

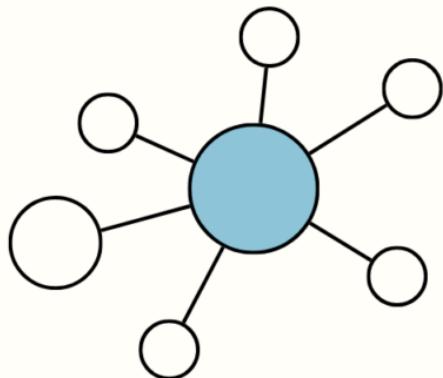
The larger your Luck Surface Area, the more likely you are to catch luck as it flows by!

The Luck Razor: When choosing b/w two paths, choose the path that has a larger luck surface area.



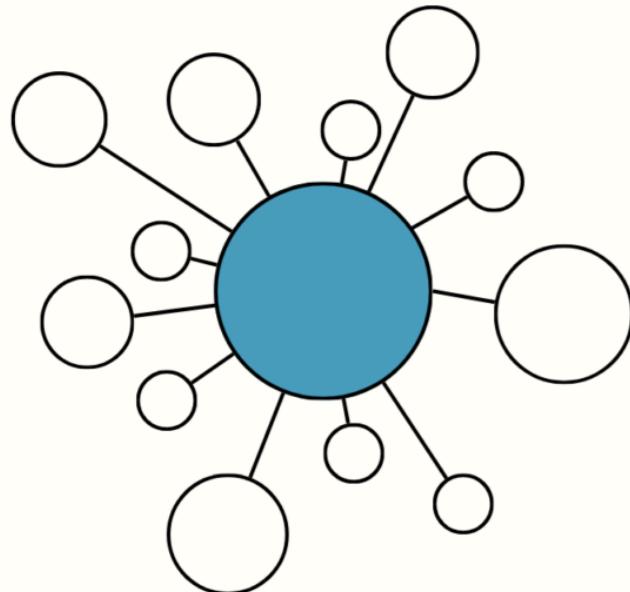
WEAKER NETWORK & INFLUENCE

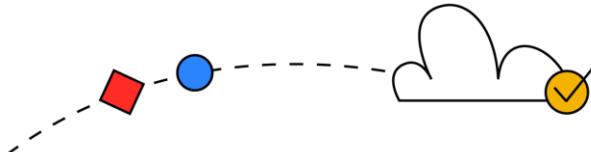
(Smaller luck surface area)



STRONGER NETWORK & INFLUENCE

(Larger luck surface area)

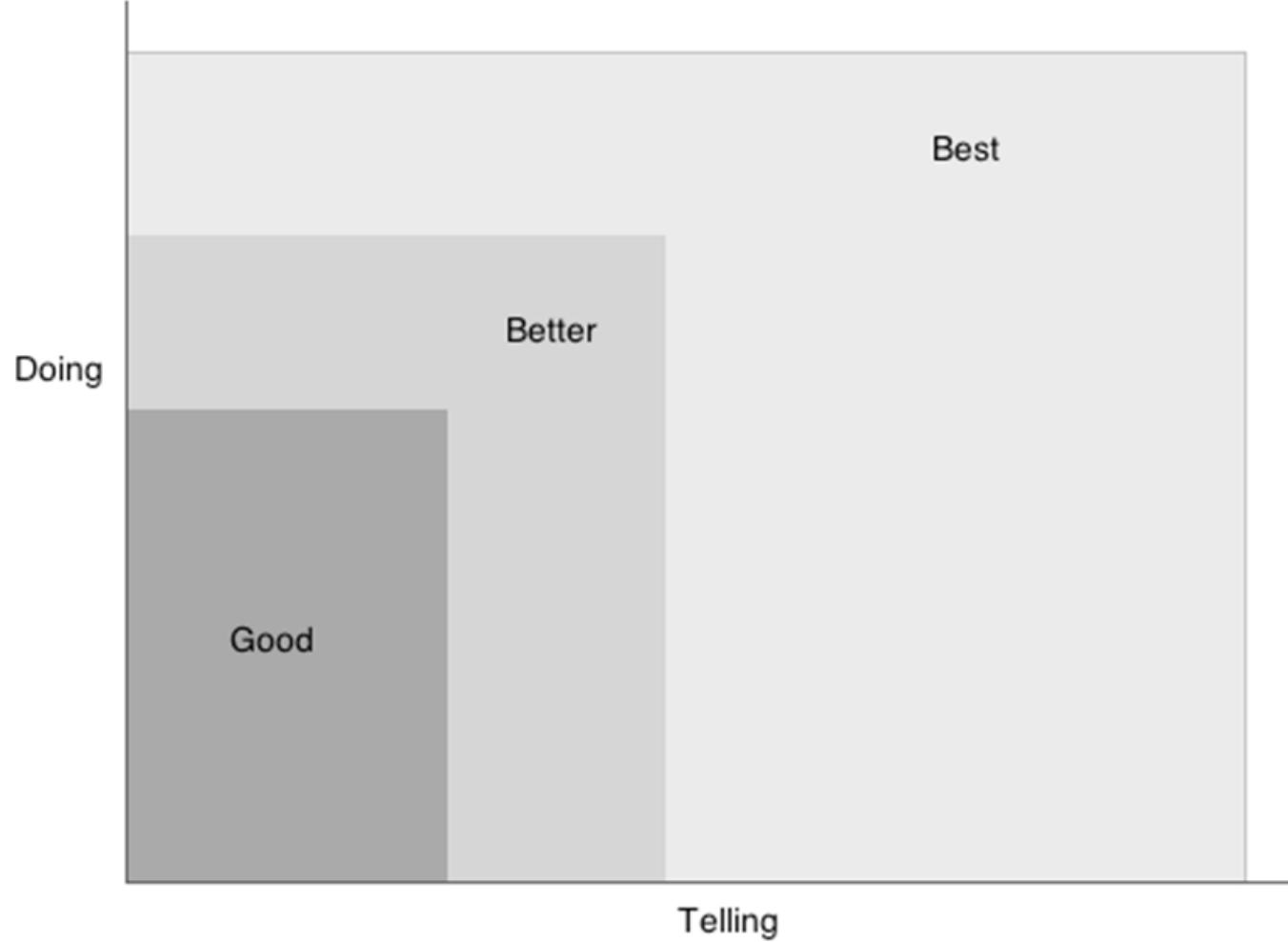




Which one are you?

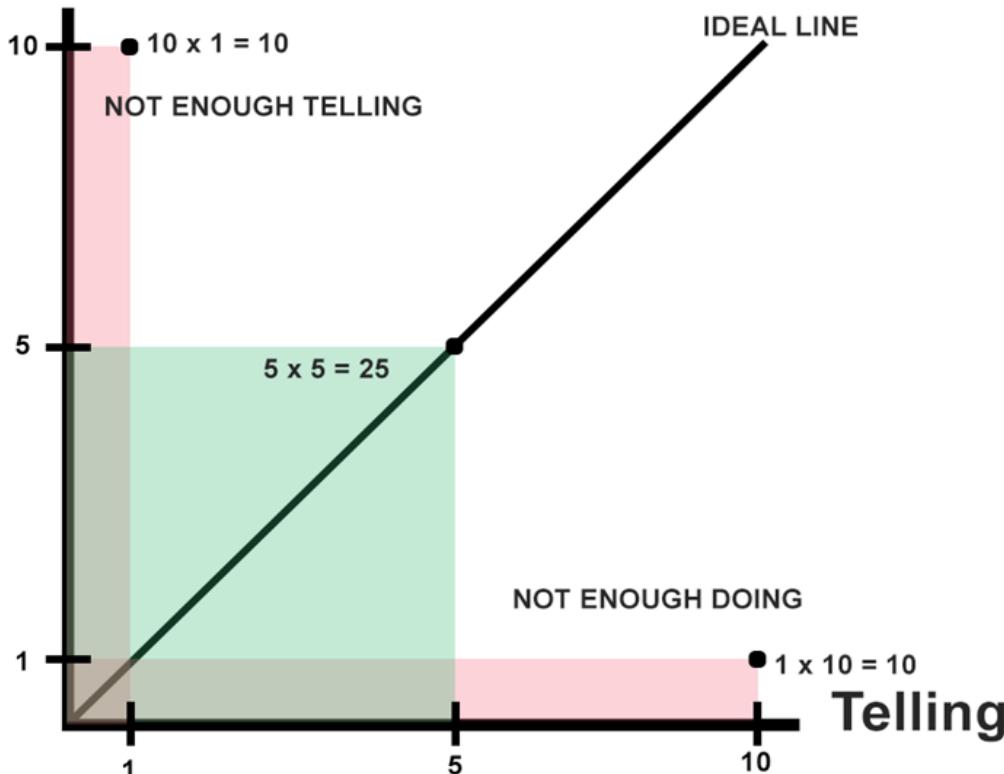
1. You actually are doing things, you've just trained yourself to think that anything you do isn't worth sharing.
1. You want to be doing things, but you can't bring yourself to get started.

- When people become aware of your expertise, some percentage of them will take action to capture that value, but quite often it will be in a way you would never have predicted.”
- The infectious nature of passion, and that taking action and sharing your passion will tend to attract others towards it, again amplified by the number of people who know about it.

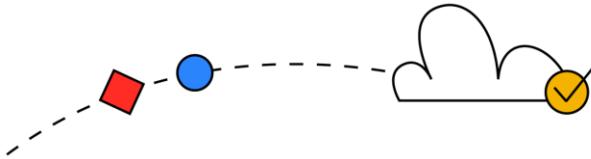


Luck Surface Area

Doing



“The law of averages : The relative frequency of an event should correspond to its probability. For example, if the probability of heads in a fair coin toss is 50%, then according to the law of averages, the proportion of heads in a series of tosses should be close to 50%”



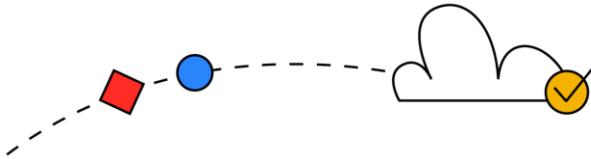
“Luck is rarely a lightning strike, isolated and dramatic. It’s much more like the wind, blowing constantly. Sometimes it’s calm, and sometimes it blows in gusts. And sometimes it comes from directions that you didn’t even imagine.”

Tina Seelig - Stanford professor and the creator of Framestorming

Whatever you're excited about, be excited about it publicly.

Blogging, podcasting, commenting in online discussions, and following up with every customer and user, you increase the likelihood of having a serendipitous moment.

It's a fun concept to consider – but perhaps less of a scientific occurrence than the Law of Averages.



“Engage with people from a place of care and generosity rather than focusing on selling or personal gain. Connecting with the right platforms and communities who might be interested in what you’re doing and are passionate about.”

Share Your Learnings at a Sustainable Pace

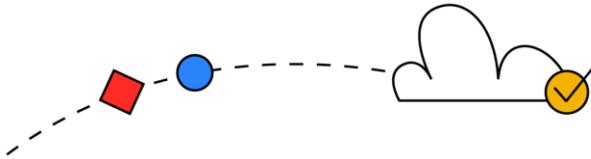
Over time, it's generally more impactful to make small, consistent progress towards an identity-based goal (like being someone who runs regularly) than inconsistently focusing on one huge goal (like running a marathon) - [Atomic Habits](#) by James Clear states,

Teaching reveals gaps in our knowledge. When we're aware of those gaps, we become more humble, and we ask more questions



Learn the importance of being discoverable by showcasing your work

— Show your work by Austin Kleon



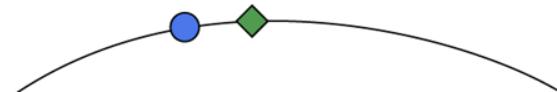
“The person who says he knows what he thinks but cannot express it usually does not know what he thinks.”

— Mortimer Adler

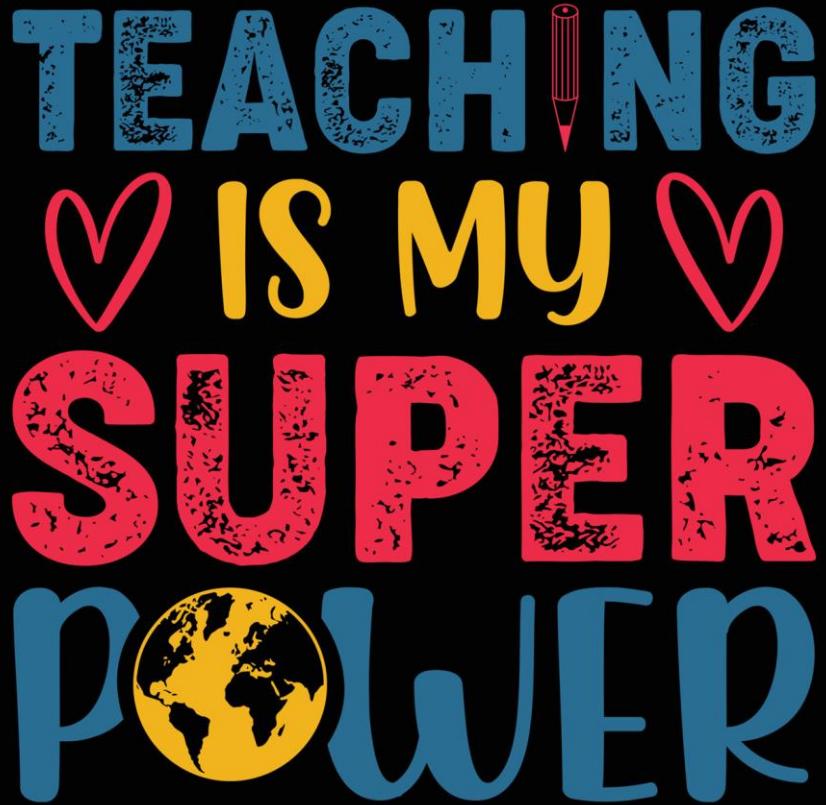
Process, Care, and Craft

Digital gardening : embrace the idea that the process of documenting is more important than the final presentation

Share seeds of thoughts to be cultivated in public



TEACHING
IS MY
SUPER
POWER



What's your superpower?



References

Jason Roberts : <https://twitter.com/exojason> - Coder, entrepreneur, and podcaster - Luck Surface Area

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<https://www.swyx.io/create-luck>

<https://github.com/readme/guides/publishing-your-work> : Aaron Francis // Marketing Engineer, Tuple

<https://modelthinkers.com/mental-model/surface-area-of-luck>

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<https://www.contagiousenthusiasm.com.au/recharge-social-battery/>

<https://www.brenel.io/blog/luck-surface-area>

<https://sammatla.com/luck-surface-area/>



Be healthy both mentally and physically



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