

# Lead Engineering Teams to Achieve Their Greatest Potential

**Cheryl Leung**  
Director of Engineering, Core Teams



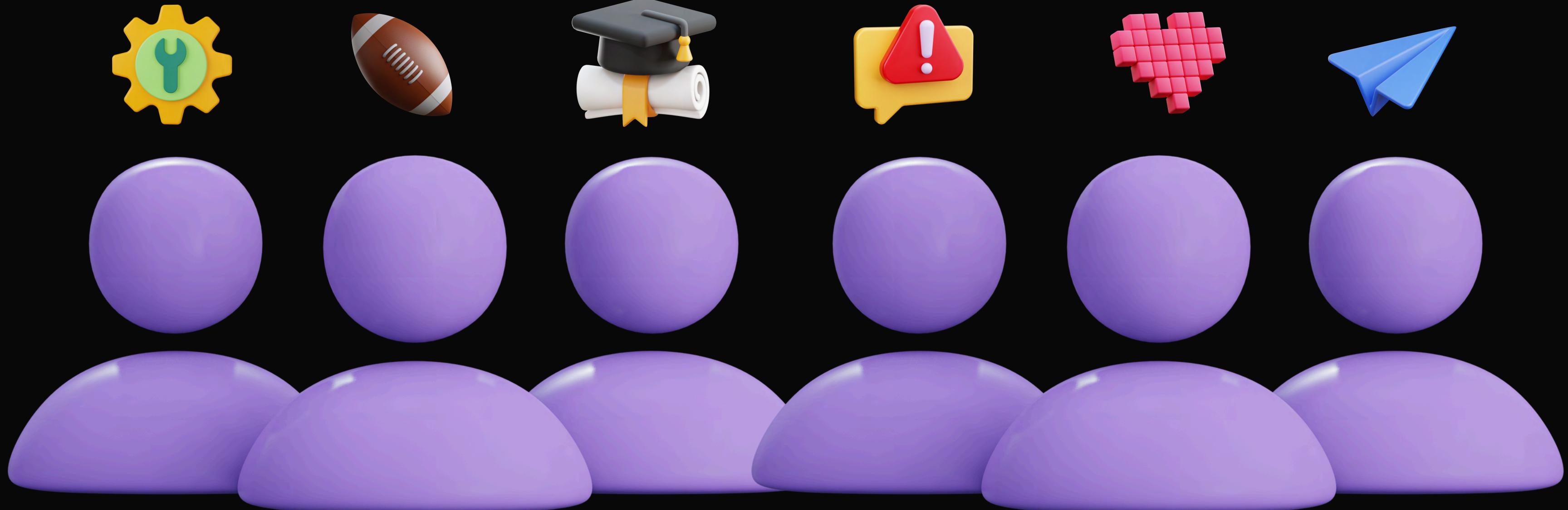


# The goal of this talk today

# For the purposes of this talk, I want to give us all a scenario.

We are given 6 really individually talented developers, all with different strengths, motivations and personalities to work together as a team.

Let me introduce them:



# The Pragmatist

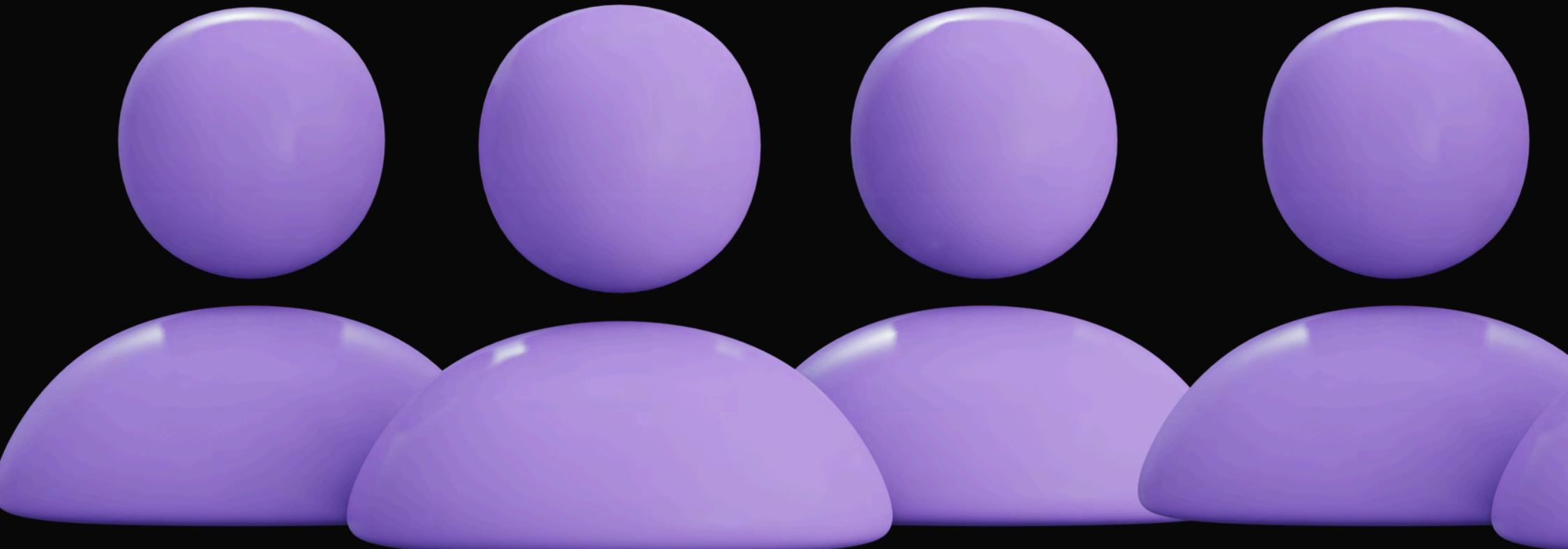
## ABOUT THE DEVELOPER

Fast and efficient, writes functional code that works ("it compiles, it ships?")

Leaves TODOs that live in the codebase for years

Enjoys non-fiction books that provide immediate value (e.g., The Pragmatic Programmer)

EFFICIENT,  
FUNCTIONAL



# The Team Player

## ABOUT THE DEVELOPER

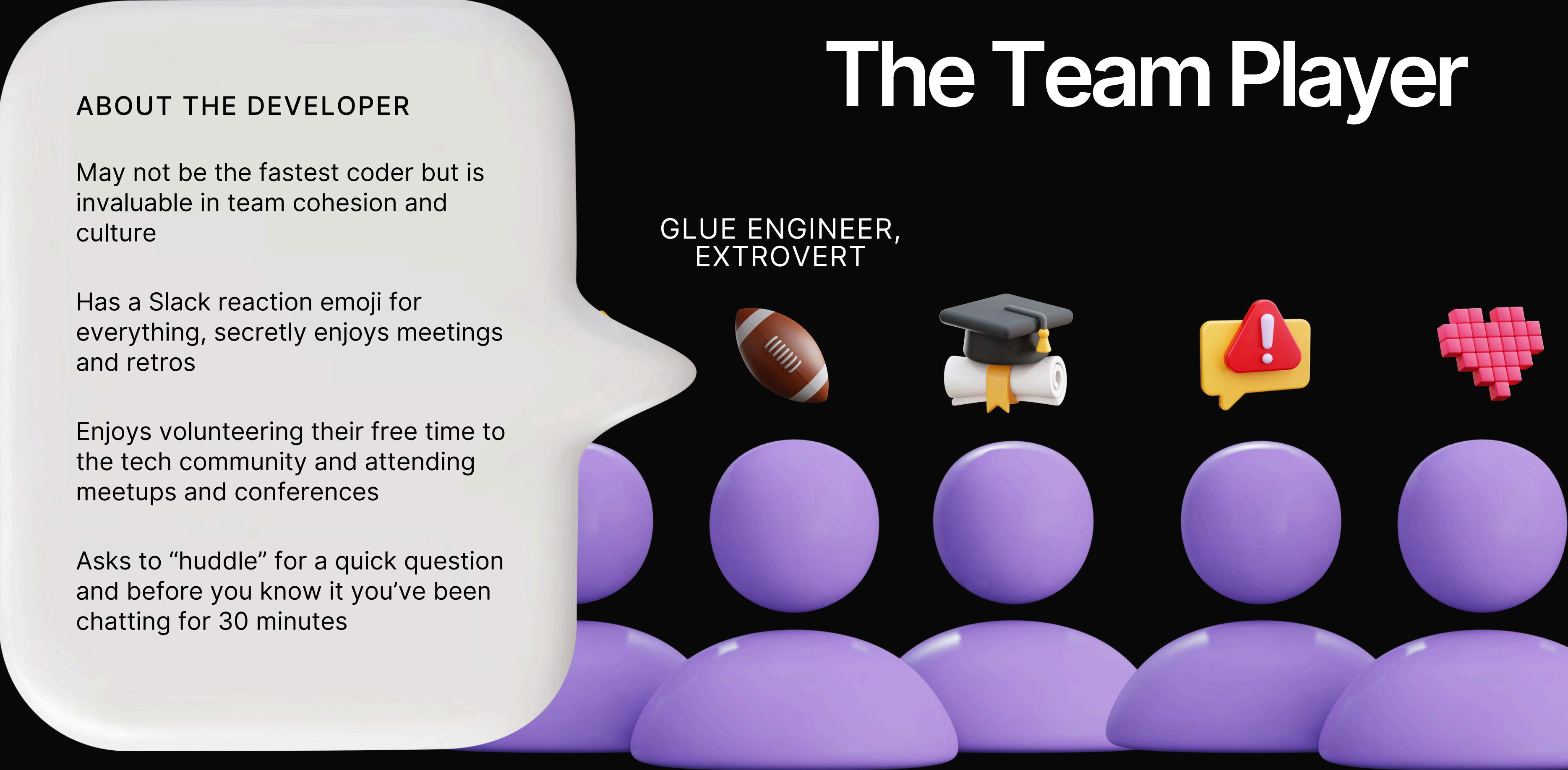
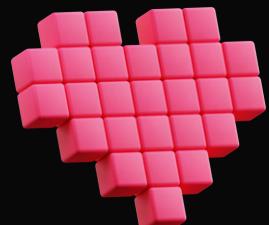
May not be the fastest coder but is invaluable in team cohesion and culture

Has a Slack reaction emoji for everything, secretly enjoys meetings and retros

Enjoys volunteering their free time to the tech community and attending meetups and conferences

Asks to “huddle” for a quick question and before you know it you’ve been chatting for 30 minutes

GLUE ENGINEER,  
EXTROVERT



# The Senior Who's Seen It All

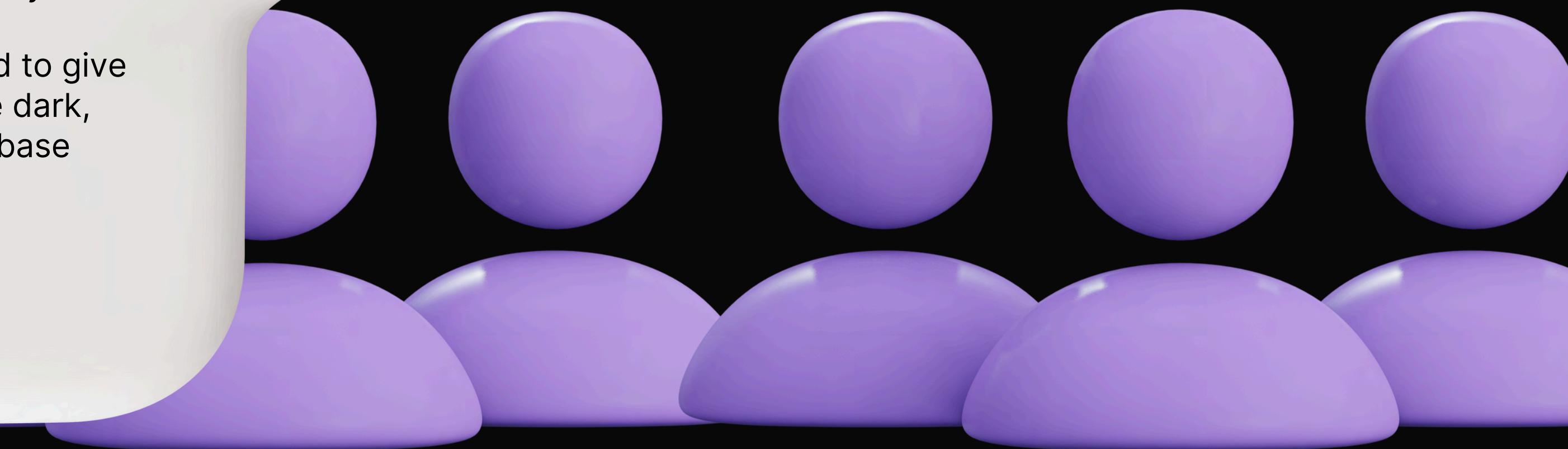
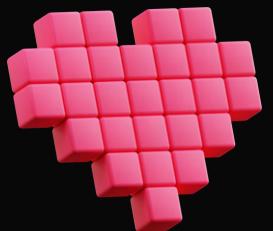
## ABOUT THE DEVELOPER

Likes to reminisce about “old days when it was the wild west” when things were developed with no process

Has the **most** valuable, obscure information that no one would think of but it was critical that they did

From time to time will need to give people the rundown of the dark, spooky areas of the code base

## ANCIENT SCROLL KEEPER



# The Junior Dev in Panic Mode

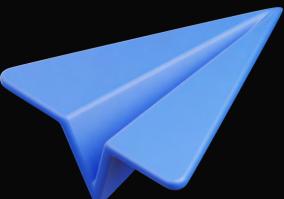
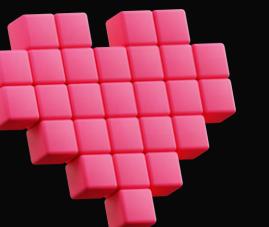
## ABOUT THE DEVELOPER

Thinks every bug they introduce will crash the whole company

Asks a senior developer for help and then immediately figures it out

Starts their weekend by paying for a Udemy course only to abandon it by Sunday evening

IMPOSTER  
SYNDROME  
EXPERT



## ABOUT THE DEVELOPER

Painfully obvious Type A personality (but in a good way)

Can spot a 1px misalignment from across the room.

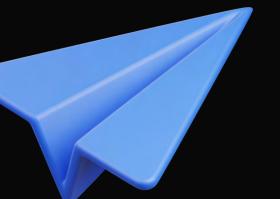
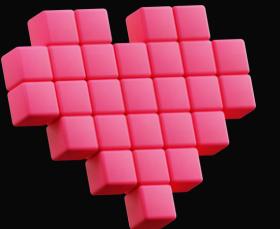
Has a Figjam for just about everything

Up to date on all the latest pop culture references, trends and newest gym and yoga studios in town

Drives your designers a little crazy

# The Frontend Perfectionist

PIXEL-PERFECT OBSESSED



# The Explorer

## ABOUT THE DEVELOPER

Will bring your tech to the next level with growth, improvements and innovation but can struggle delivering an MVP

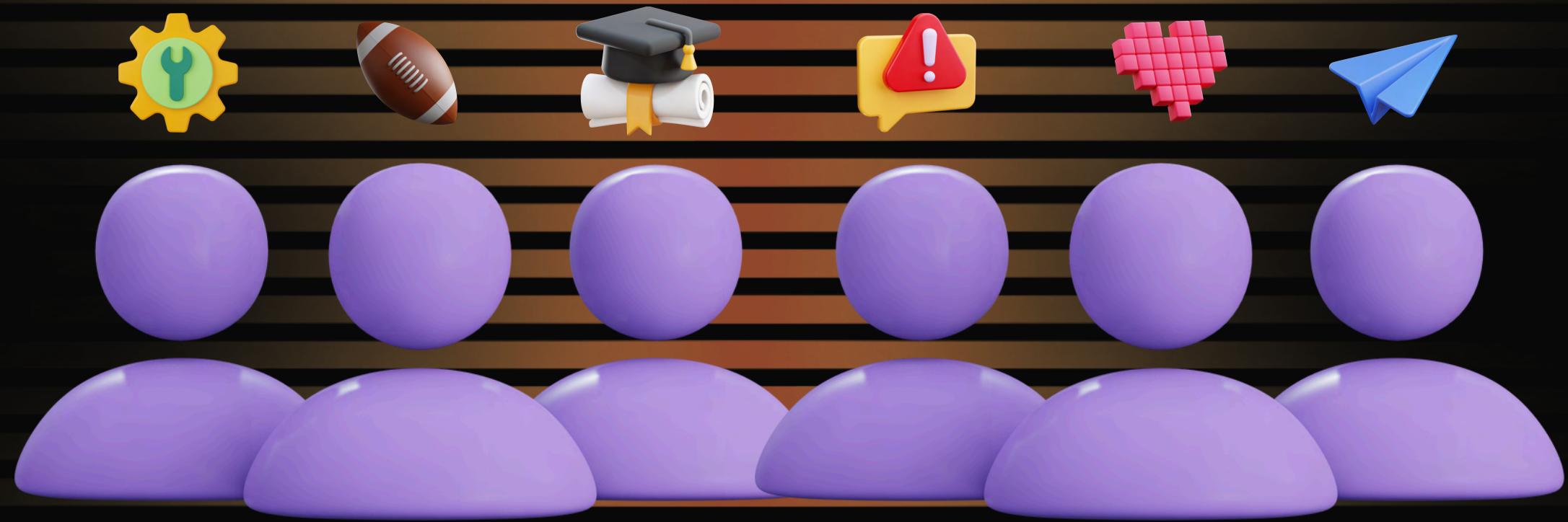
Challenges the status quo and provides really cool and/or unique suggestions

Suggests “Let’s rewrite this in Rust” even when there’s no real strong reason why

TECH INNOVATOR,  
SHINY-THINGS  
ENTHUSIAST



We, in this scenario, need to bring this very diverse team together to work towards a common goal and lead them to achieve their greatest potential.



How the %^&\* are we going to do that?

Unfortunately, there is no straight answer.

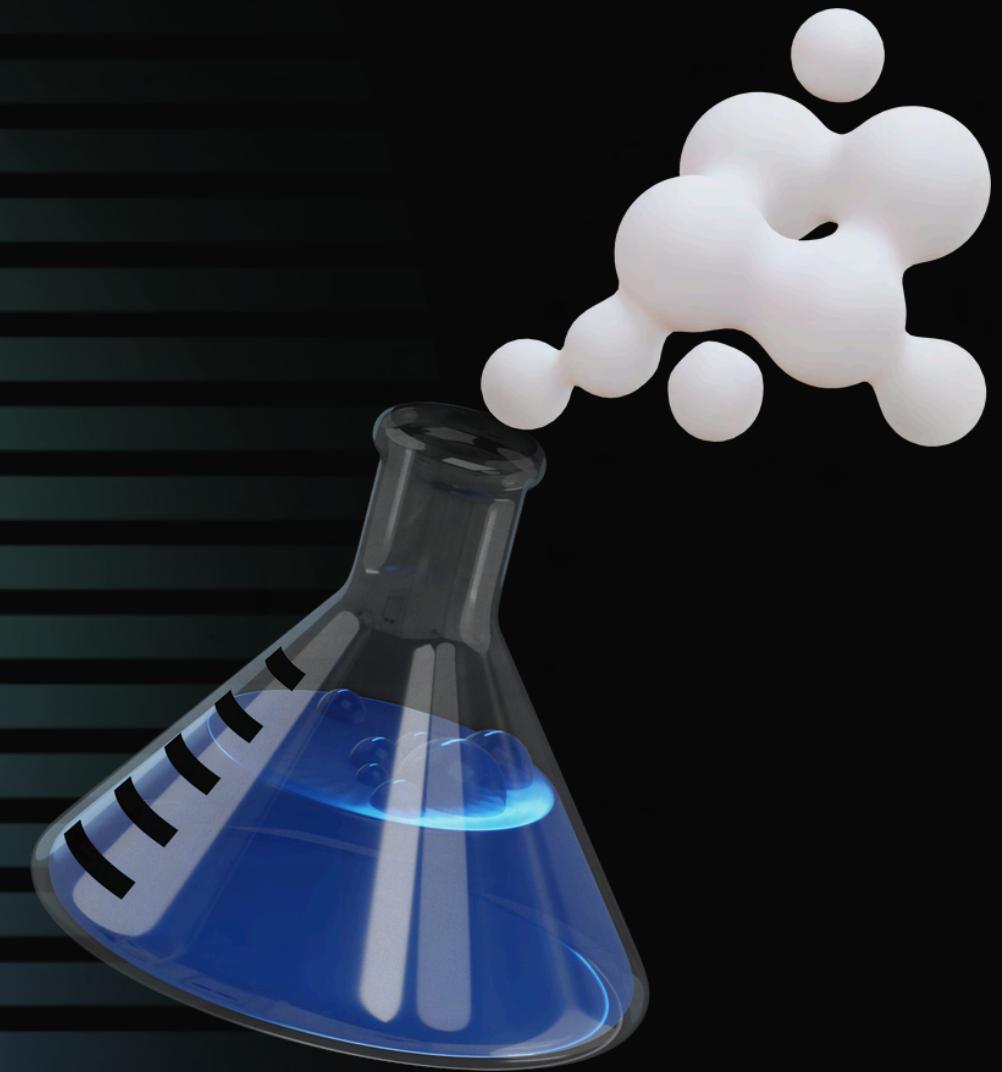


Unlike other technical talks,  
there's **no exact** input that  
guarantees a predictable  
output.



Humans are all vastly different, complex,  
emotional, and ever-changing.





Leadership is an ongoing **experiment**,  
you won't do everything perfectly, and  
you'll make mistakes.

# What I will be talking about today



OUR DIVERSE, HYPOTHETICAL TEAM

**Fundamental concepts** that are critical for leading a high performing team.

- BUILDING TRUST & PSYCHOLOGICAL SAFETY
- CLEAR EXPECTATIONS & AUTONOMY
- MOTIVATION
- TEAM CULTURE

And using those concepts by understanding your team as **people for who they are** and leveraging that, and uniquely empowering your team with each and every little decision throughout your day.

## Psychological Safety and Learning Behavior in Work Teams (1999):

- Set out to study the **relationship between error making and teamwork in hospitals.**
- Found that better teams are more willing to report their mistakes – because they felt **safe** doing so.
- Defined **psychological safety** as a key factor in team learning and performance in a model of team learning and tests it in a multimethod field study.



Amy Edmondson



# Google

## Project Aristotle

2 years 180 teams 37 000 employees

## Google's Project Aristotle (2015)

- Guided by elements in Edmondson's 1999 research, Google studied 180 teams and found that **psychological safety**—where team members feel safe to take risks and be vulnerable—was **the #1 predictor of team effectiveness**.



## Building Trust & Psychological Safety



## Motivation



## Clear Expectations & Autonomy



## Team culture



# Building Trust & Psychological Safety



## Research and key findings

Psychological safety leads to team members feeling:

More **engaged** and **motivated**, because they feel that their contributions matter and that they're able to speak up without fear of retribution

Leads to **better decision-making**, as people feel more comfortable voicing their opinions and concerns, which often leads to a more diverse range of perspectives being heard and considered

It can foster a culture of **continuous learning and improvement**, as team members feel comfortable sharing their mistakes and learning from them



# Building Trust & Psychological Safety



## Starts with the manager

- Utilizing 1:1's to build trust in a genuine way
- Important to connect with the developer on a human level:
  - “Tell me something that’s going on with you outside of work (we can both share!)”
- Modelling your own vulnerability

## Might seem like trivial small talk

If I want them to feel safe and share with me, I do want to show that I care about them as humans in a genuine way and take interest in them beyond “What is the status of this project?”



### Our Pragmatist Developer

- Likes to read non-fiction books
- Maybe we will chat about some interesting books they’ve read lately, and I’ll actively listen, show interest and follow up with questions



### Our Frontend Perfectionist

- Likes yoga, they will share with me a yoga class they went to over the weekend
- I can share with them how I went to a Pilates reformer class recently and how I could barely walk for a week



### Our Team Player Developer

- Likes to go to tech meetups in the community
- Maybe we’ll chat about how anxious I’ve been to present this exact talk at Confoo



# Building Trust & Psychological Safety



## Mistakes are learning opportunities

Not everything goes perfectly.

Fostering safety in conversation allows developers to feel safe to come to you knowing that you will help figure it out together, rather than fear / hiding.

Leaders listen, encourage debate, and model vulnerability.



### Our Junior Dev in Panic Mode

Currently learning, and will make mistakes

Juniors tend to lack confidence as it is, so giving them a safe space to bring up potential “small / silly” questions will help them learn instead of spinning their tires.

Allowing safe spaces even in public channels to be vulnerable.



# Building Trust & Psychological Safety



**What does building trust & psychological safety in teams look like for you and your team?**

As team members are all different, so are leadership styles and managers. No matter what building trust and psychological safety looks like to you, just keep in mind:

- Come from a place of authentic and genuine care
- Show empathy, active listening and create a space where individuals feel valued and respected
- Show compassion, understanding while also keeping the individual accountable for their work



# Building Trust & Psychological Safety

## Misconceptions



**"It's about being nice."**

- There are many polite workplaces that don't have psychological safety because there's no candor, and people feel silenced by the enforced politeness.
- My CEO likes to say: "Be kind, not nice. We need to be direct and kind and not focus on surface level niceness."



**"You must feel comfortable in a psychologically safe environment."**

- Learning and messing up and pointing out mistakes is usually uncomfortable, being vulnerable will feel risky
- The key is to take risks in a safe environment – one without negative interpersonal consequences.
- "Anything hard to achieve requires being uncomfortable along the way."



*Athletes train, push themselves and their bodies, and takes risks. But does so in a way that is safe as to not get injured.*



## Building Trust & Psychological Safety



## Motivation



## Clear Expectations & Autonomy



## Team culture



# Clear Expectations & Autonomy



## The importance of clear expectations

- Setting up the team for success
- Giving enough **direction** and **clarity** and what our expectations are
- It could be clear in your head, but unless it's explicitly documented - people **can't read your mind**.
- There is **more motivation** surrounding acknowledging clear roles and responsibilities for a high performer.



### Senior Dev Who's Seen It All

- This developer will tend to do things without being asked since they know what is needed for success
- If we don't acknowledge their level of contribution, it's more than likely they will feel demotivated and undervalued, and not want to take those extra initiatives since it's not a clear responsibility



### Explorer

- This developer can potentially lean heavily on experimenting more than on efficient developing and delivery
- For start-ups, business needs and delivery is essential for success. It's important that expectations are clear so we can positively support **The Explorer**'s time and drive to innovate while also being clear of what is expected of them

# Clear Expectations & Autonomy



## The importance of autonomy

### Boots Intrinsic Motivation

Autonomy gives team members the **freedom** to decide how to approach challenges, leading to **greater internal drive**.

### Encourages Innovation

Teams can be free to experiment, iterate and come up with **creative solutions** and be **adaptable to change**.

### Enhances Accountability

When teams are trusted with autonomy, they feel a **stronger sense of ownership** over outcomes which drives better **performance** and **accountability**.



#### Our Junior Dev in Panic Mode

This developer is still learning, they need autonomy to be able to build their confidence and figure things out on how to approach challenges and be motivated with their work

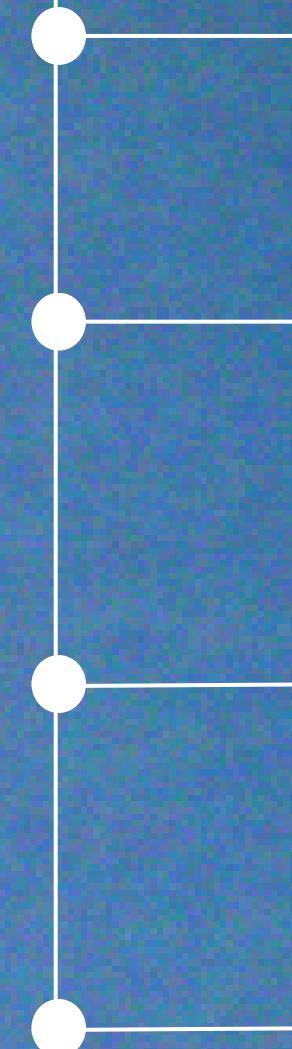


#### The Explorer

This developer thrives on being able to innovate, so in order to support this - have to give them the autonomy and the space for it

# Clear Expectations & Autonomy

## OARS



### Ownership

- Clearly assign to someone to own the project
- Make sure expectations are clear

### Authority for accountability

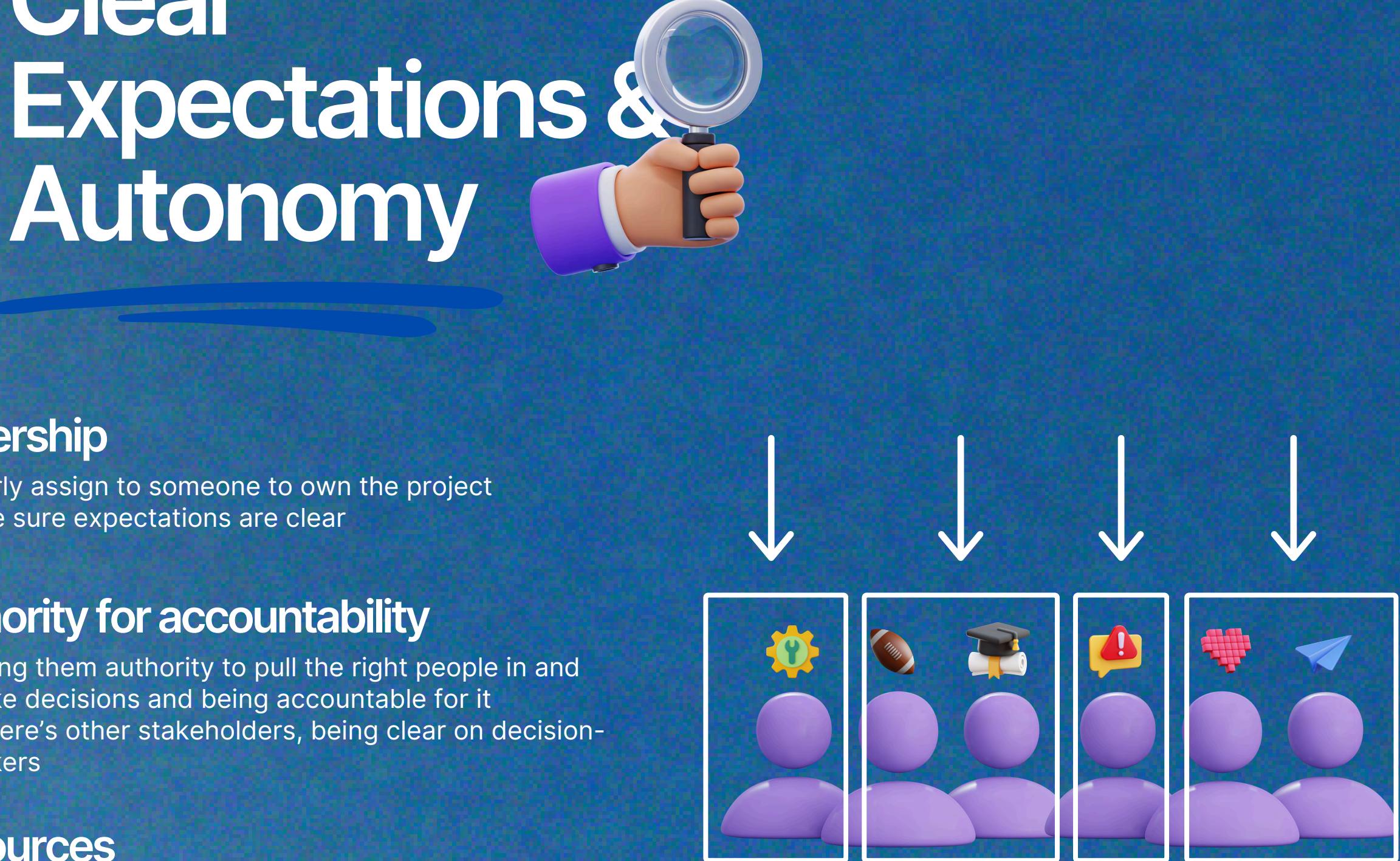
- Giving them authority to pull the right people in and make decisions and being accountable for it
- If there's other stakeholders, being clear on decision-makers

### Resources

- Set them up for success
- Tools, documents, handovers, design, architecture documents, plans, any context they need, etc.

### Success metrics

- Define what success looks like
- Clear goals & clear expectations = better results



## Building Trust & Psychological Safety



## Clear Expectations & Autonomy



## Motivation



## Team culture



# Motivation

## Finding a developer's motivation

Gallup's State of the Global Workplace Report

Highly engaged teams (i.e., those with strong motivation and commitment) outperform low-engagement teams by **21% in profitability** and **17% in productivity**.



### Not all developers are motivated by the same things.

- Sometimes it's harder to get information from 1:1's. and will get blanket statements like "everything is good!"
- Or just generally won't be as clear and self-reflective
- Instead of using open ended questions, ask them to rate their motivation from 1-10 on past projects or scenarios

**Motivation**  
is a balance of:

### Intrinsic

- Passion for problem solving
- Autonomy and Creativity
- Mastery & Learning
- Purpose & Impact



### Extrinsic

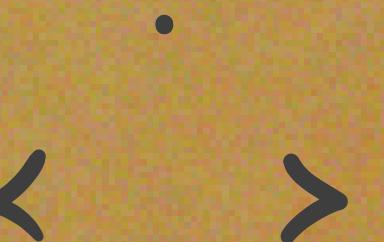
- Financial Rewards
- Recognition and Career Advancement
- Team and Organizational Culture
- Work-Life Balance

# Motivation

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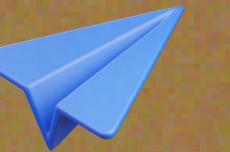
## Extrinsic

- Financial Rewards
- Recognition and Career Advancement
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- Work-Life Balance



### Our Team Player Developer

- Might be more likely to share their unfiltered thoughts about what motivates them
- Knowing them from our 1:1s, also know that they would be motivated to work with other developers together rather than solo



### Our Explorer

- More motivated in innovating, newer technology and challenging ideas
- Being an advocate for them to put them on projects that could bring the best out of them *if possible*
- Maybe trying to limit them on time sensitive features or quick MVPs, or giving space during cooldowns to innovate

**Extrinsic** • Team and Organizational Culture

**Intrinsic** • Autonomy and Creativity  
• Mastery & Learning

## Building Trust & Psychological Safety



## Clear Expectations & Autonomy



## Motivation



## Team culture



## Building Trust & Psychological Safety



## Motivation



## Clear Expectations & Autonomy



## Team culture



# Team culture

## What is team culture?

A shared set of **values, behaviors, and practices** that guide how team members interact, collaborate, and pursue common goals.

It isn't just "nice to have"; it's a **critical** ingredient that drives **trust, innovation, and sustained performance**.



### Shared values & mission

A **shared understanding of team purposes and values**, which become the guiding principles for every decision and interaction

### Behavioural norms & rituals

Culture is expressed through **daily practices and rituals** whether it's stand-ups, retros, or other activities that build rapport, reinforced shared values and create a **sense of belonging**.

### Leadership and role modeling

Leaders play a crucial role by embodying the team's values and **leading by example**. Leaders demonstrating behaviours like **transparency, respect and learning from mistakes**, it reinforces strong, positive culture.



#### Our Team Player Developer

Leveraging naturally extroverted / social team members that care about culture to help drive the team culture



#### Senior Dev Who's Seen It All

Having your more confident senior developers drive team values through mentorship and leading by example

# Team culture

## Recognition

- Public shout-outs and peer recognition in team meetings
- Recognition programs, growth opportunities, rewards
- In tools like Slack, creating a continuous cycle of appreciation and encourages a culture of gratitude

## Mentorship

- Promotes increased engagement between team members
- It helps build trust, and helps promote inclusion and belonging

## Ways to foster strong team culture



## Team Building

- A strategic investment by encouraging collaboration and fostering personal connections - helps create an environment where team members feel valued and motivated
- Ice breakers, “Get to know you”, team lunches, team outings, retrospectives



### Pragmatist, Junior Dev In Panic Mode, Explorer

Mentorship and team building can help developers that are less confident or less extroverted to feel more of a sense of belonging to a team



### Team Player, Senior Dev, Frontend Perfectionist

Allow more extroverted developers initiate culture team building activities so it's a shared team responsibility

## Building Trust & Psychological Safety



## Motivation



## Clear Expectations & Autonomy



## Team culture



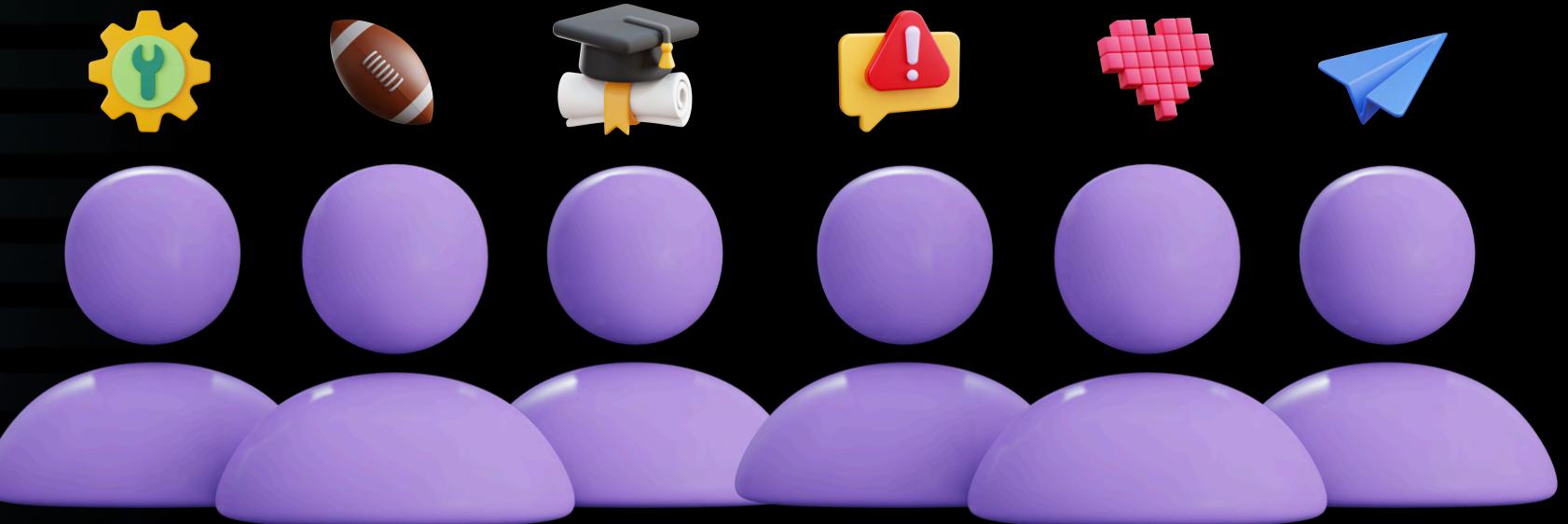
# Leading people is hard.

Maybe you won't make all the right decisions - but continuously challenge your assumptions.

**Understand how your team functions as people** and use that to your advantage.

Lead with **empathy**, prompt your team to find ways to learn from mistakes and continue to get better, **trust** in your team and take a **people first** approach -

Ultimately people will step up, and everything else will follow.



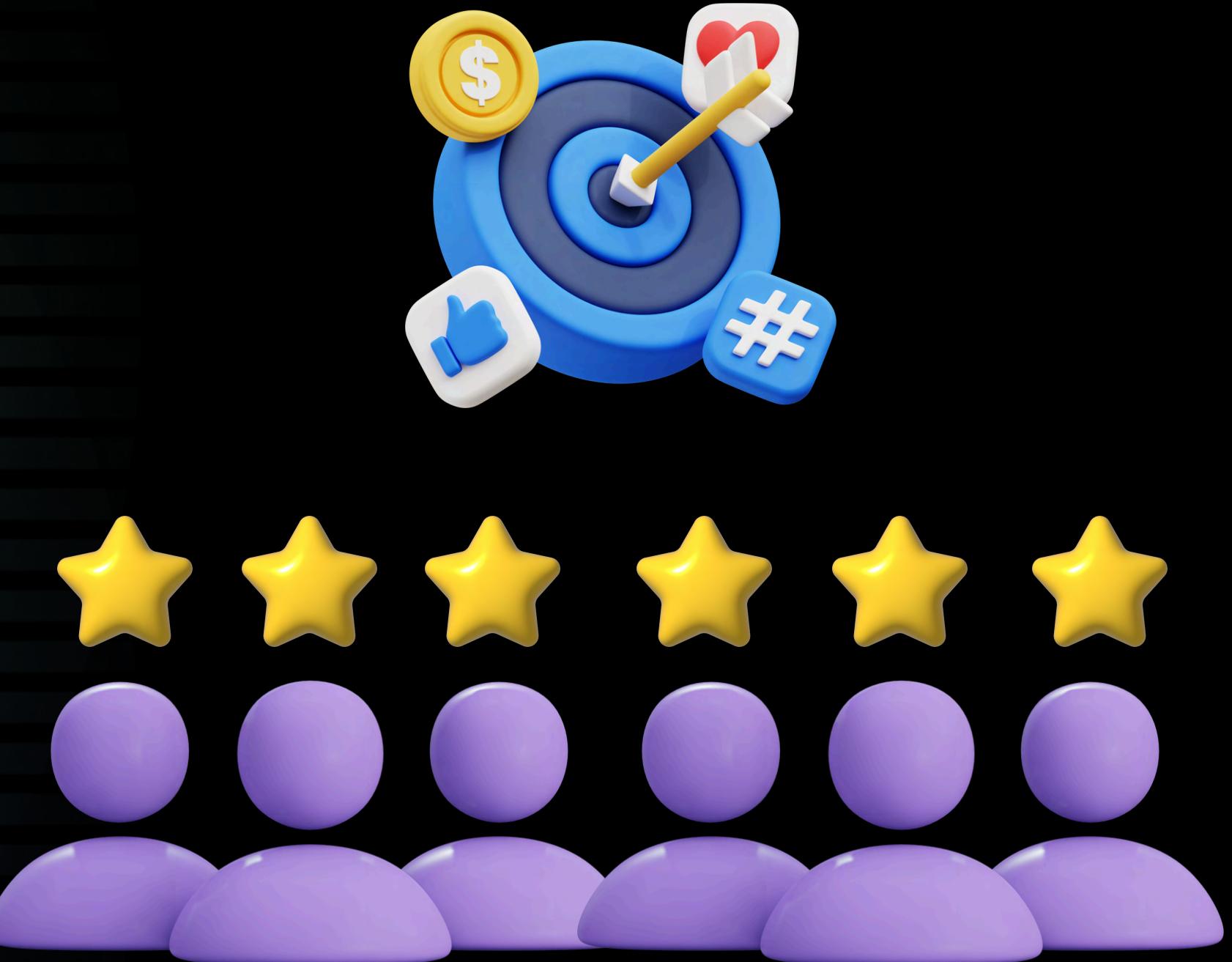
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“



**“You can’t be great without the greatness of others.”**

- *Nick Sirianni*

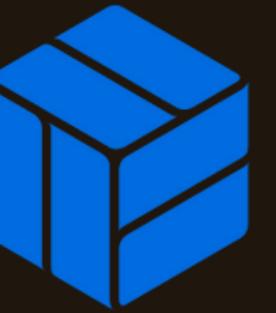
”

“You can’t be great without the greatness of others.”

- Nick Sirianni

THANK  
YOU!





# COLAB

Come chat with us in our lounge area!

Draw on Friday for everyone that fills out an entry:



(1)  
**AWS CERT. EXAM  
VOUCHER**  
(\$300 USD VALUE)

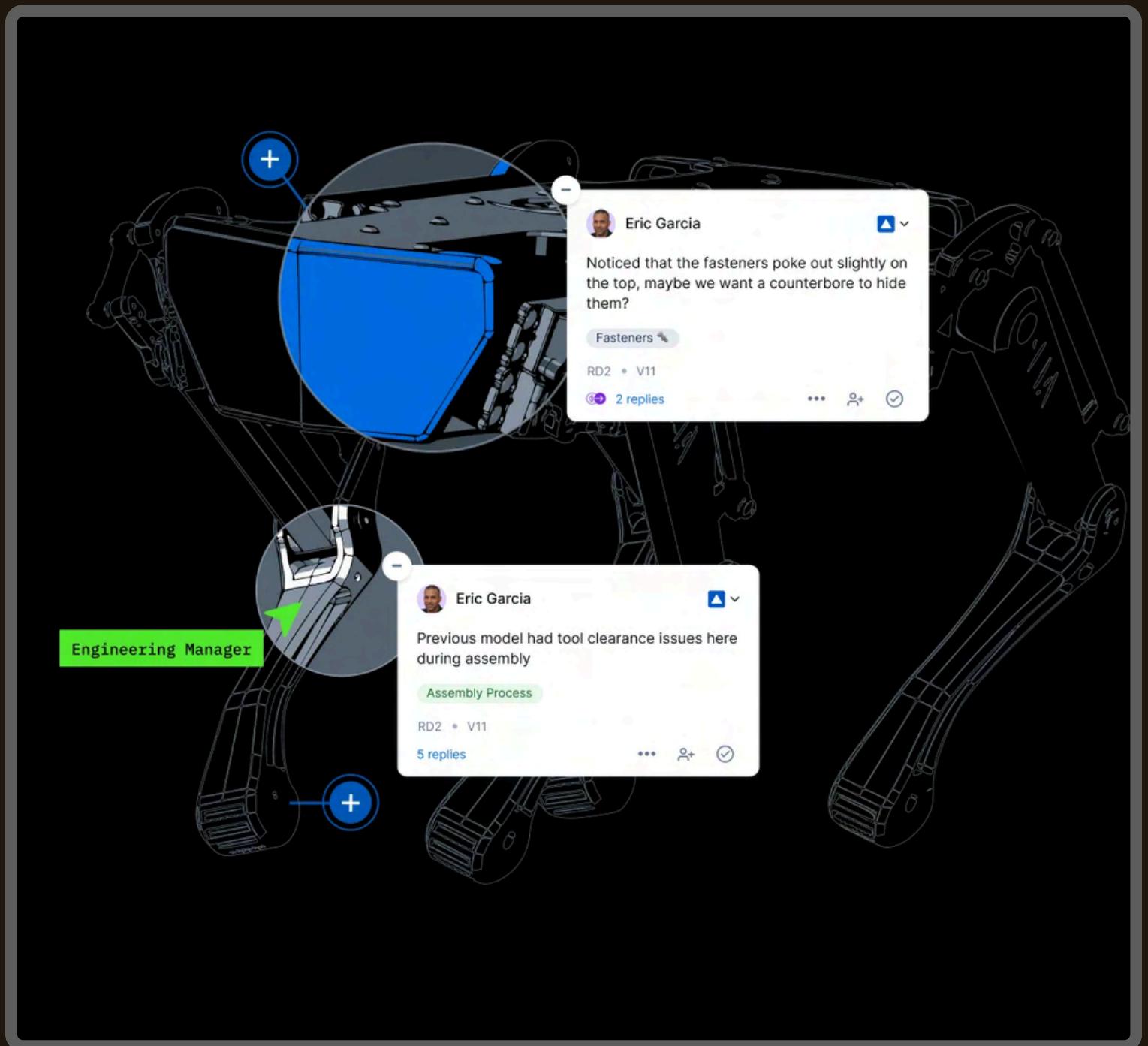


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**LEGO SETS**

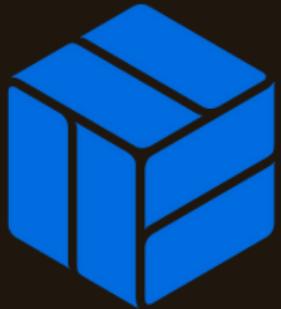


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- Unlimited PTO
- Strong team focus in people, culture and values
- Collaborate with extremely smart **and** kind people
- Build cool, innovative s\*\*\*
- **Our company's mission:**
  - To build the future — faster, transforming the way mechanical engineers work together



# COLAB

Come chat with us at our booth!



Cheryl Leung





# Building trust & psychological safety

## The research



### Psychological Safety and Learning Behavior in Work Teams (Amy Edmondson, 1999):

In a multimethod field study, defined psychological safety as a **key factor in team learning and performance**. They learn faster and outperform those without it.

### Google's Project Aristotle (2015):

Guided by elements in Edmondson's 1999 research, Google studied **180 teams and found that psychological safety**—where team members feel safe to take risks and be vulnerable—**was the #1 predictor of team effectiveness**.

# Clear Expectations & Autonomy



## The research



### Self-Determination Theory (Deci & Ryan, 1985)

- When employees have autonomy, they feel more motivated, engaged, and committed to their work.
- Autonomy needs to be **balanced with clear structure**—ambiguity leads to disengagement.

### Harvard Business Review (2018)

- A Harvard study found that teams with "bounded autonomy" (**clear expectations but freedom within those boundaries**) performed significantly better than teams with too little or too much autonomy.
- The best teams had aligned goals with flexible execution, enabling ownership while maintaining clarity.

### Netflix Culture Deck – "Freedom & Responsibility" Model

- Netflix has a culture of high autonomy, but with clear expectations around performance and accountability.
- Leaders set strategic direction, but execution is left to the teams, fostering innovation.



# Motivation

## The research



### Gallup's State of the Global Workplace Report

Highly engaged teams (i.e., those with strong motivation and commitment) outperform low-engagement teams by **21% in profitability** and **17% in productivity**.

### Google's Project Aristotle (2016)

- Teams that felt their work was meaningful and impactful were more motivated and **performed better**.
- Motivation was strongest when teams believed they were **working toward a shared goal** that mattered.

# Team culture

## The research



### Harvard Business Review and McKinsey Studies

- Various studies have shown that organizations with **strong, cohesive cultures** experience higher employee engagement, lower turnover, and better overall business performance
- Teams with clearly articulated cultures can be **21% more productive and experience significantly higher levels of innovation.**