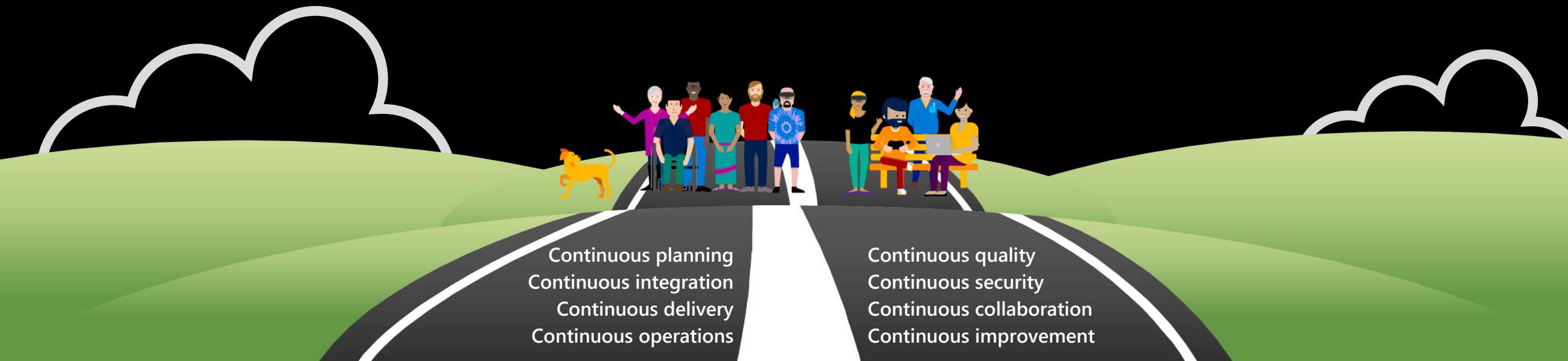
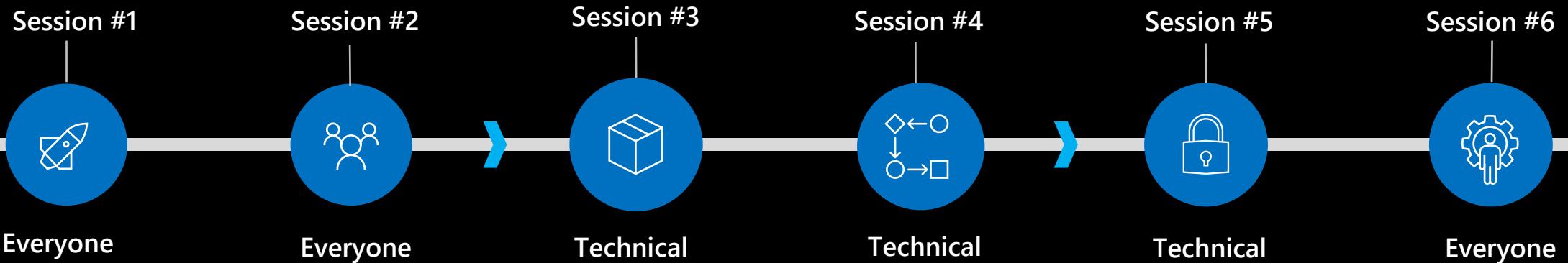
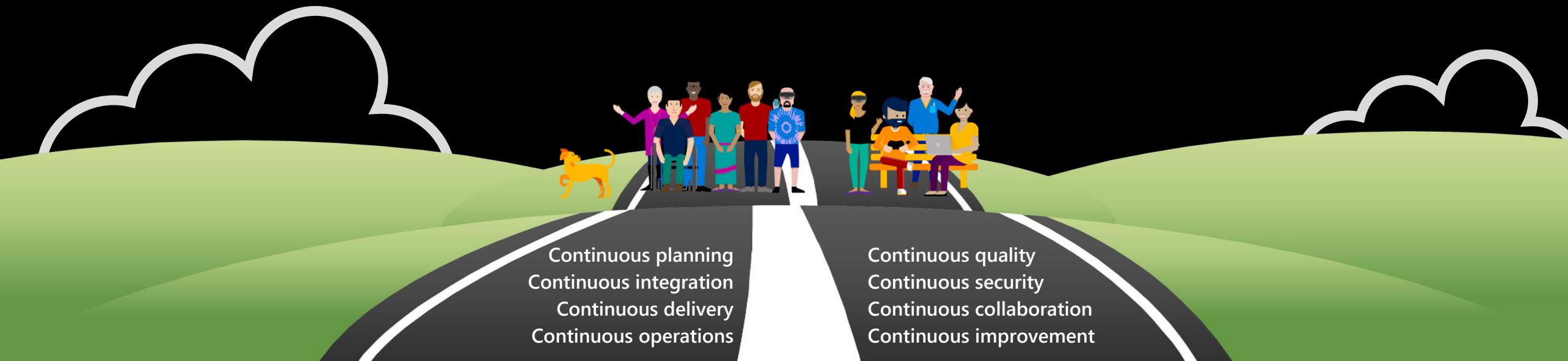
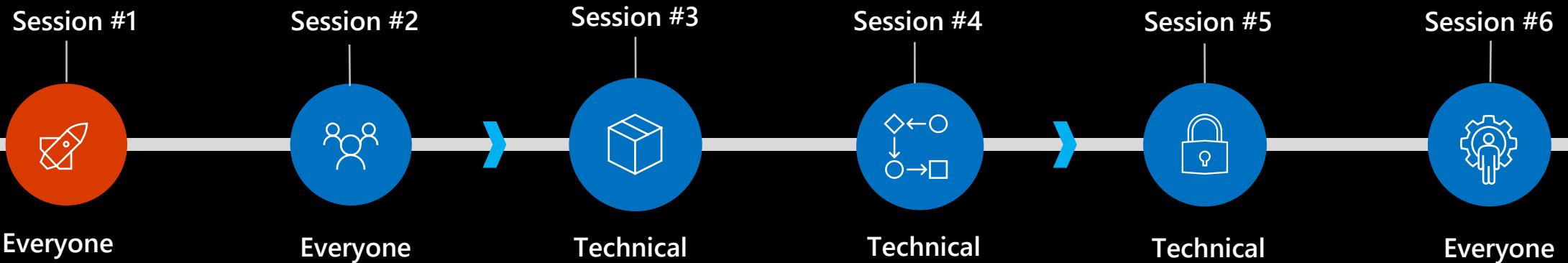


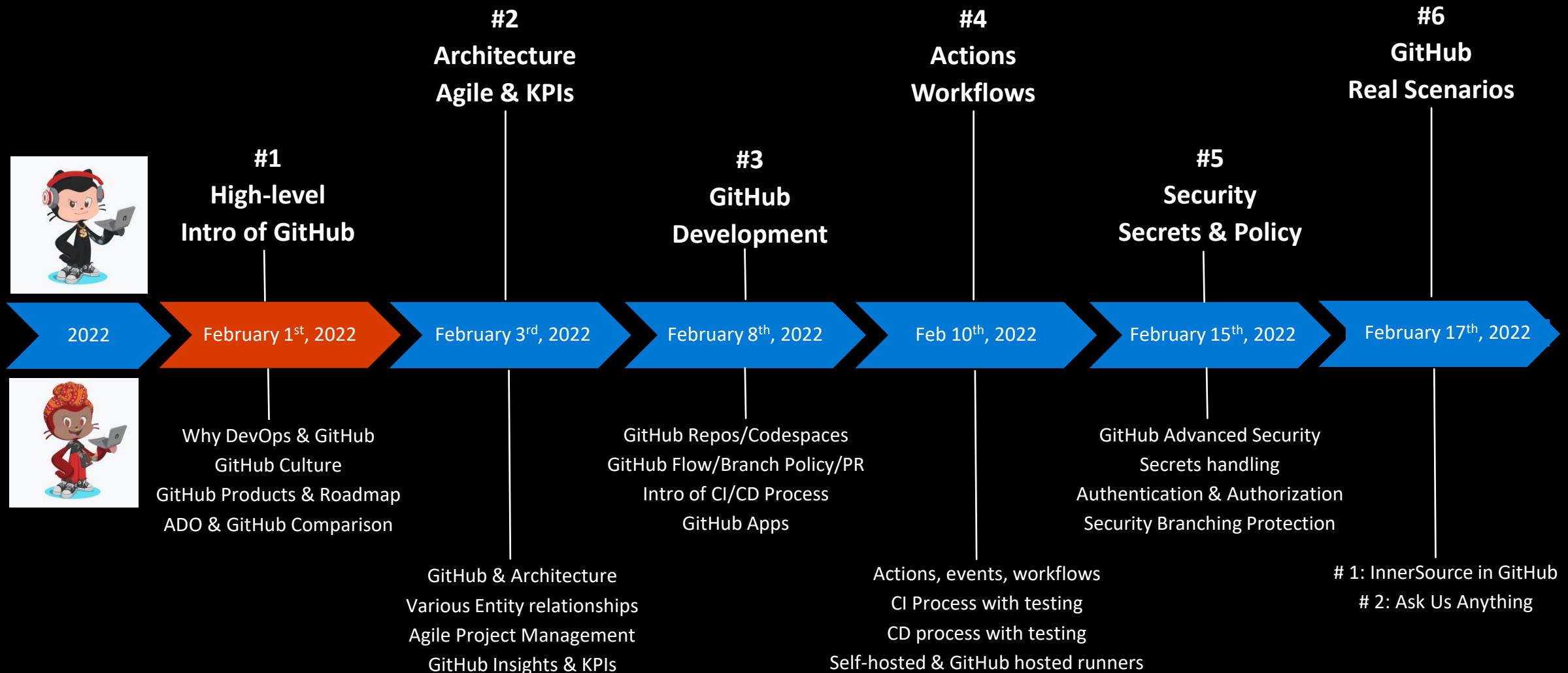
# GitHub Bootcamp By DevOps Dojo



# GitHub Bootcamp By DevOps Dojo



# GitHub Bootcamp – February 1<sup>st</sup>, 2022



# The Topics of the Day – Session #1

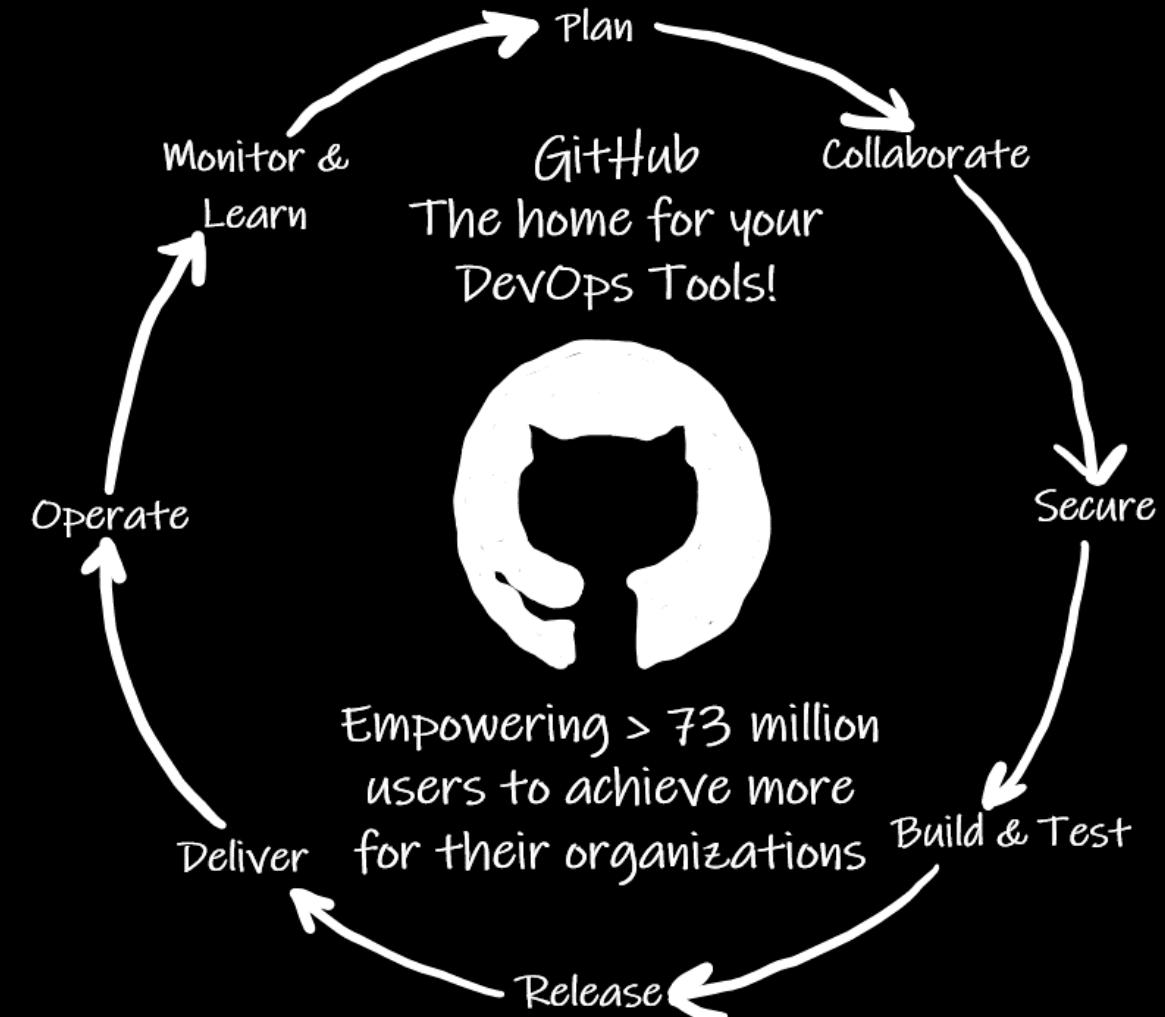
1 Why DevOps & GitHub

2 GitHub Culture

3 GitHub Products & Roadmap

4 Azure DevOps & GitHub Comparison

5 Questions



[Margarita Sanz]



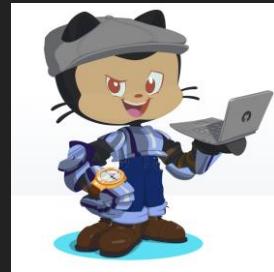
[Deep Mehta]



[Harleen Kaur]



[Nithyanathan R]



[Charlie Gu]



[Yue Sheng]



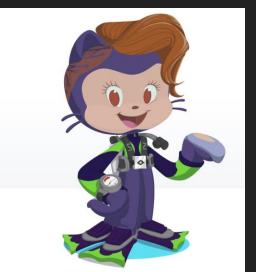
[Garry Trinder]



[Dave Burnison]



[April Edwards]



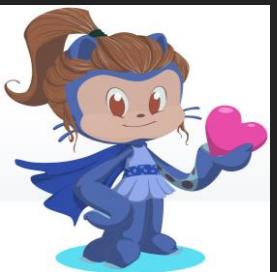
[Pierre Donyegro]



[Kan Tang]



[Beste Altinay]



[Ronghua Chen]



[Giulia Cupani]



[Kory Tuyo]



[Piyush Jain]



[Aakanksha]



[Abdeslam M]



# WHO WE ARE

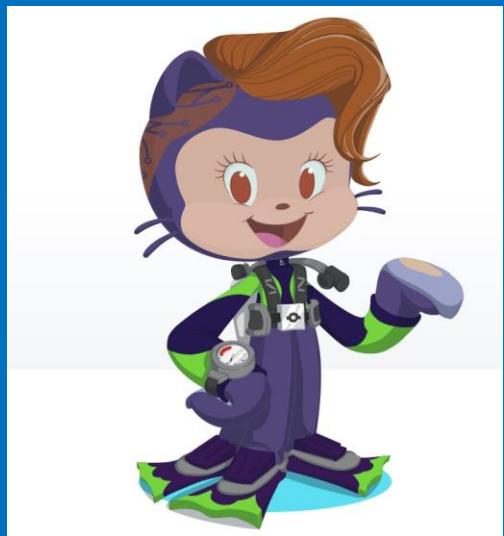
# GitHub Subject Matter Experts

- **Dave Burnison**
- **Dave McKinstry**
- **James Garcia**
- **Bryton Herlong**
- **Mickey Gousset**
- **Briana Swift**



# Session #1 Presenters

[April Edwards]



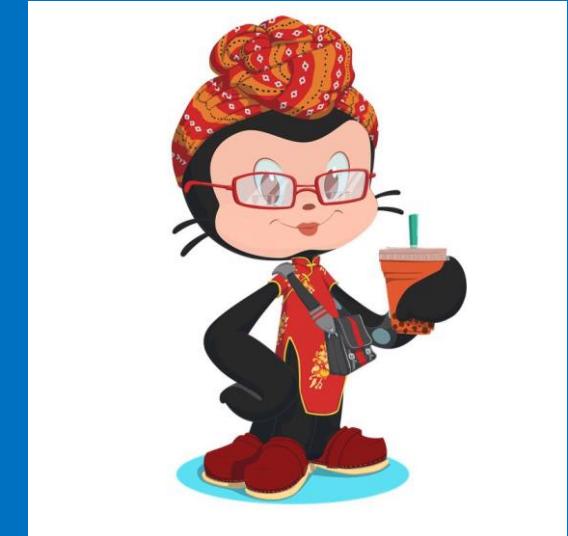
[Garry Trinder ]



[Pierre Donyegro]



[Kan Tang]





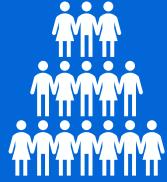
Presented by [April]

# Why DevOps & GitHub

GitHub & Dojo Presentation 2022 (15 minutes)

# Why GitHub?

#1



**Brand & OSS &  
Innersource &  
Community**

#2



**Developer  
Platform &  
Innovation**

#3



**Security  
Platform &  
Features**

#4



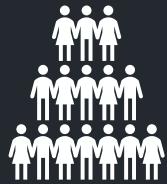
**Microsoft  
Strategy on  
1ES & GitHub**

**GitHub Culture**



# Why GitHub #1 – Brand, OSS, Innersource & Community

#1



**Brand & OSS &  
Innersource &  
Community**

#2



**Developer  
Platform &  
Innovation**

#3



**Security  
Platform &  
Features**

#4



**Microsoft  
Strategy on  
1ES & GitHub**

**DevOps Culture**



# GitHub is the largest developer community on Earth

73M+

developers

200M+

private and public  
repositories

1,000s

top open source  
communities

2.6B+

contributions  
per year

4M+

organizations

84%

Fortune 500  
companies

## The most innovative companies



coinbase



NETFLIX

shopify

slack



stripe

twilio

Uber

## The most open source projects



APACHE  
HTTP SERVER PROJECT



GraphQL



npm

TensorFlow

# Innersource with GitHub

Enabling open-source culture and best practices inside your organization

## Increased collaboration

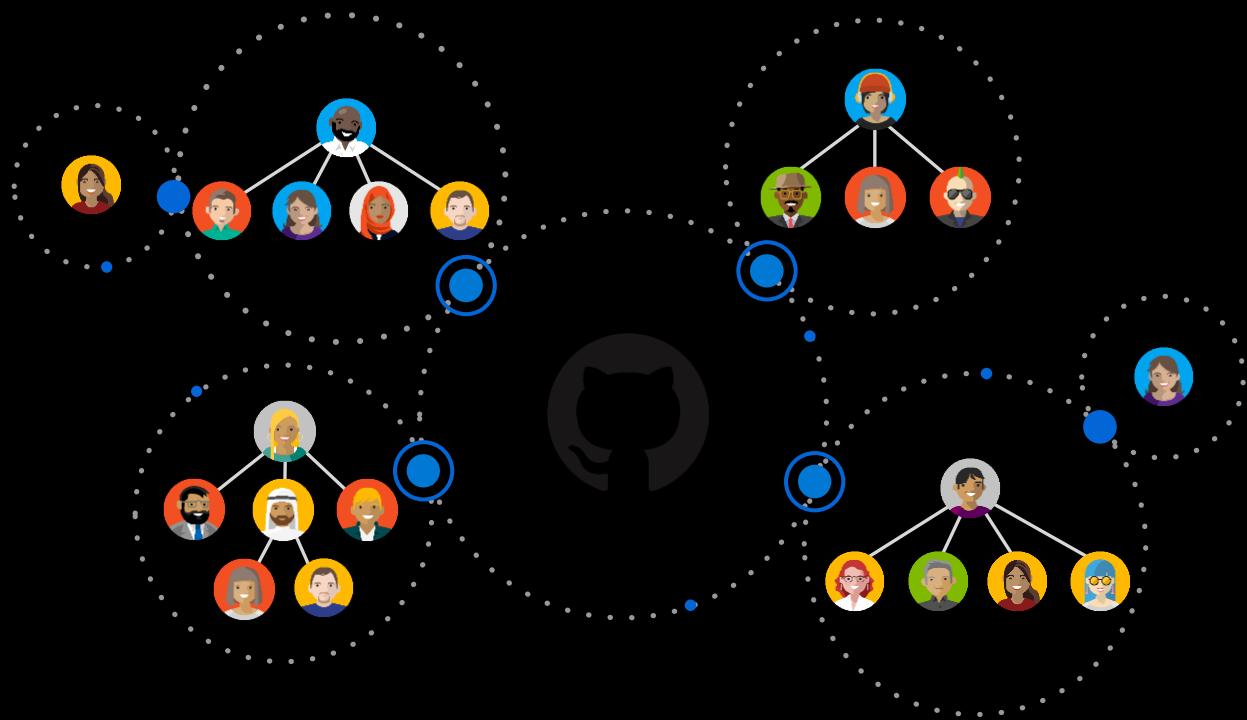
Encourage teams to collaborate within your organization using the same processes and practices as open-source communities

## Breaking silos

Simplified collaboration across teams, sharing of knowledge, improved code reuse, and secured workflows

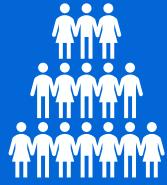
## Higher developer satisfaction

Leveraging inner source and open-source practices increases developers' satisfaction, enabling them to work on interest projects and increase their skills



# Why GitHub #2 – Developers & Innovation

#1



**Brand & OSS &  
Innersource &  
Community**

#2



**Developer  
Platform &  
Innovation**

#3



**Security  
Platform &  
Features**

#4



**Microsoft  
Strategy on  
1ES & GitHub**

**GitHub Culture**



# GitHub



## Collaboration

Attract and retain the best talent  
with tools developers know and love



## Security

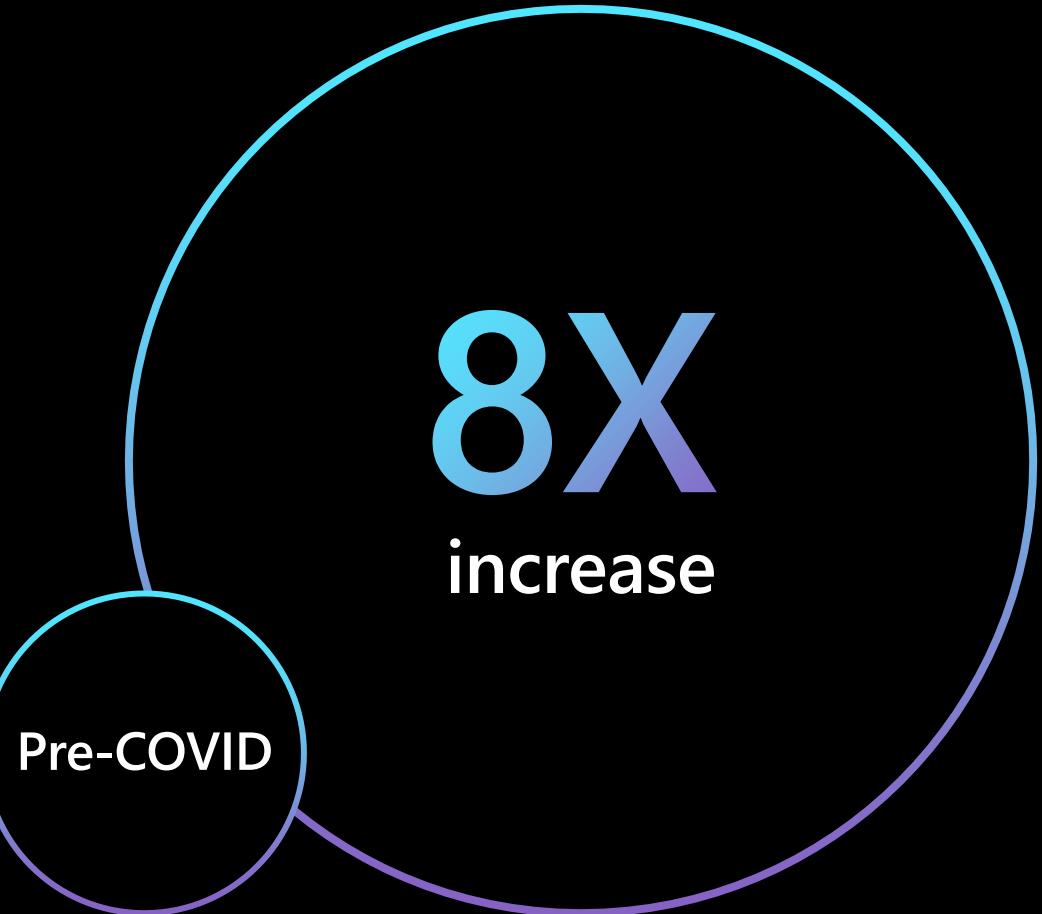
Securely integrate open source  
code in your software



## DevOps

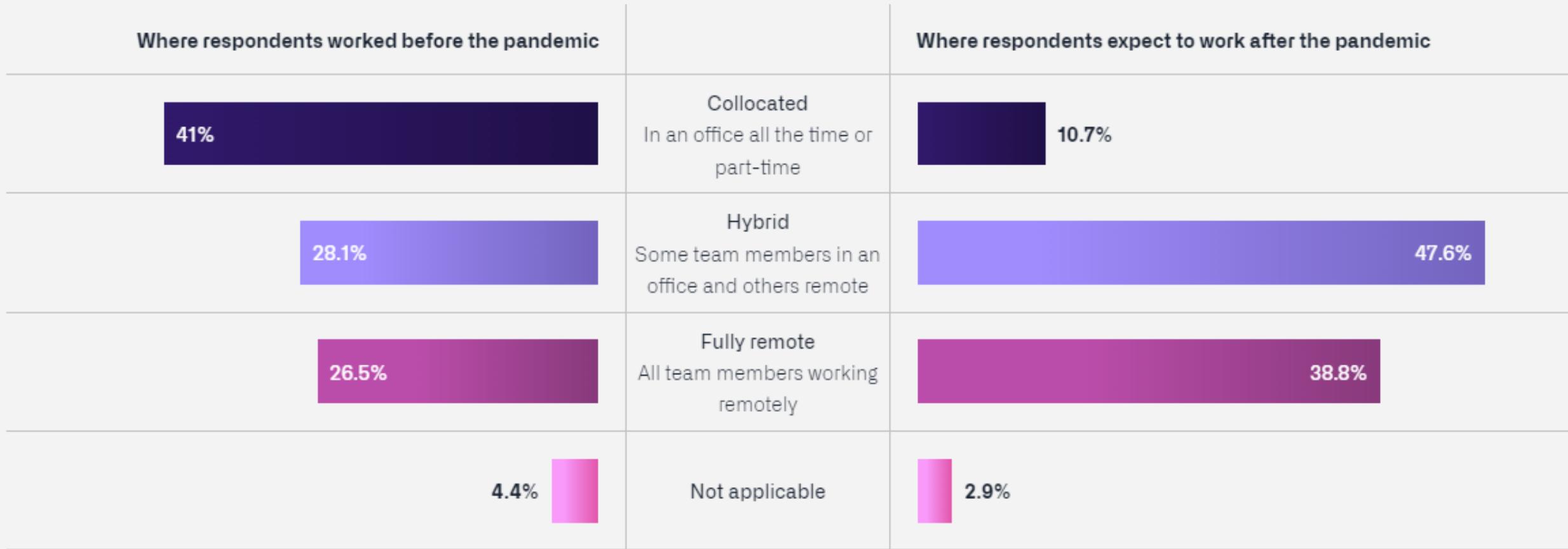
Automate workflows  
from code to any cloud

# Remote job postings for developers

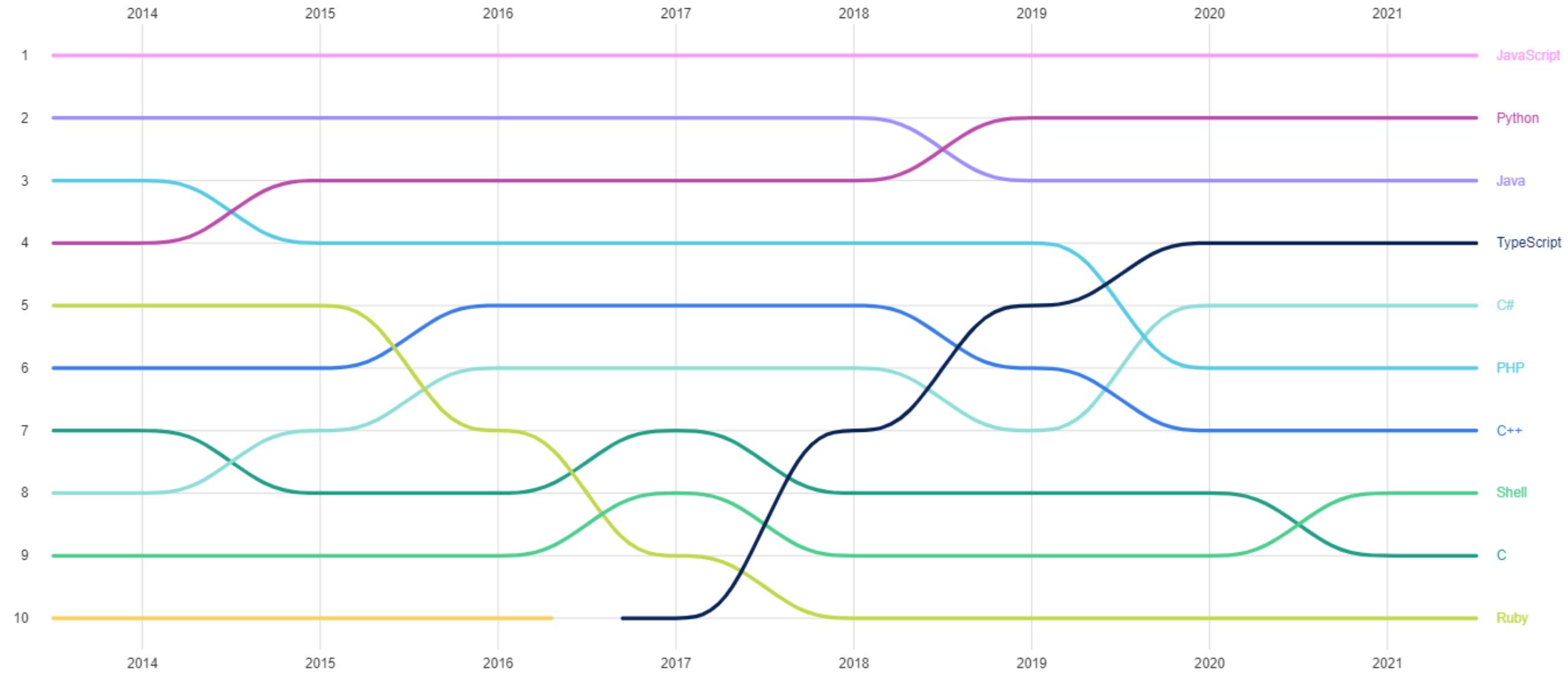


May 2019–Apr 2020 vs. May 2020–Apr 2021  
Source: LinkedIn

# Work before and after the pandemic



# Top languages over the years



# Why GitHub #3 – Security Platform & Features

#1



**Brand & OSS &  
Innersource &  
Community**

#2



**Developer  
Platform &  
Innovation**

#3



**Security  
Platform &  
Features**

#4

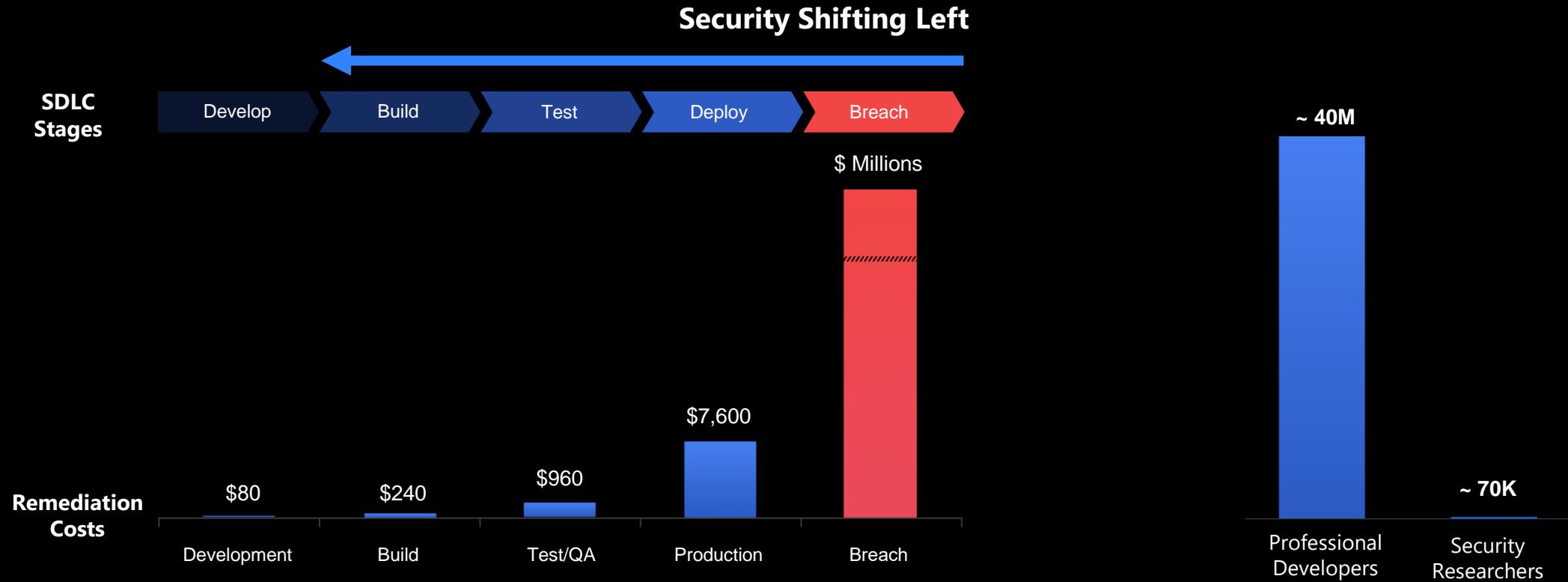


**Microsoft  
Strategy on  
1ES & GitHub**

**GitHub Culture**



# Shift security left with GitHub Advanced Security



Vastly more cost effective to remediate during development

**570X** more developers than security researchers

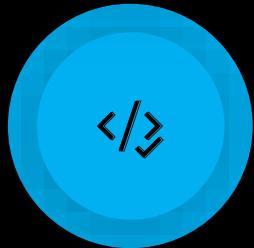


# GitHub Advanced Security



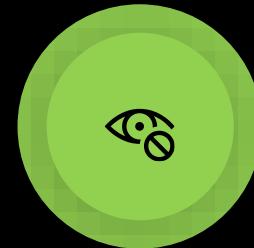
## Dependency scanning

Integrated review of dependencies alerts and security updates



## Code scanning

Extensible framework for code scanning integrated within the developer workflow. Backed by industry-leading CodeQL engine



## Secret scanning

Scanning for leaked secrets in public and private repos partnership with 40+ providers

# Security at every step of the DevOps lifecycle

## Pre-commit

Threat modeling

Secure coding standards

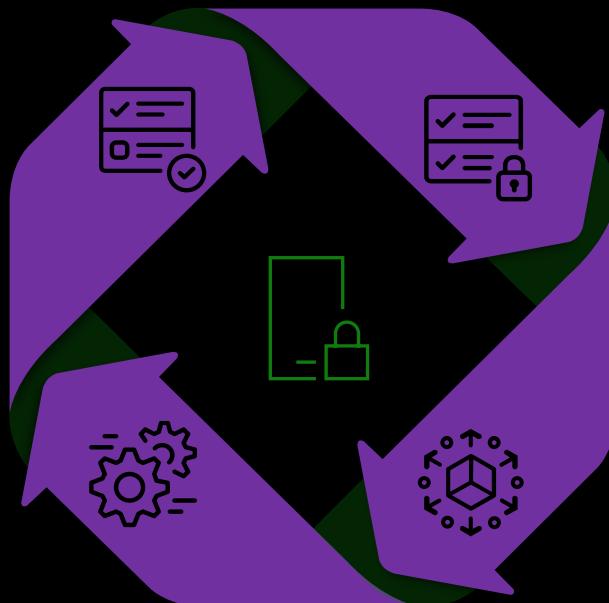
Peer review

## Operate and monitor

Continuous monitoring

Threat intelligence

Blameless postmortems



## Commit (CI)

Static code analysis

Dependency management

Credential scanning

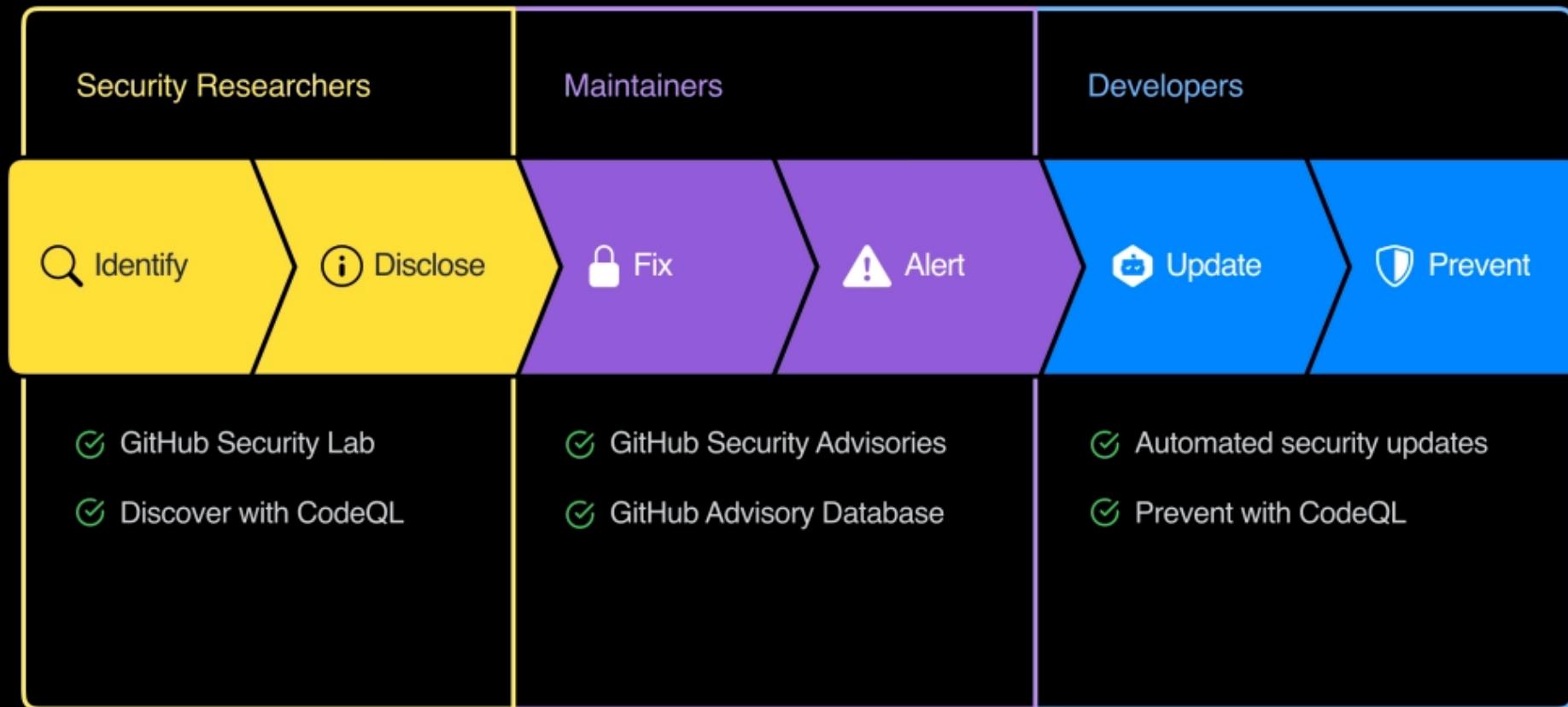
## Deploy (CD)

Infra as code (IaC) scanning

Cloud configuration checks

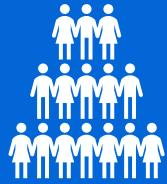
Security acceptance tests

# Security functions by personas



# Why GitHub #4 – Microsoft Investment

#1



Brand & OSS &  
Innersource &  
Community

#2



Developer  
Platform &  
Innovation

#3



Security  
Platform &  
Features

#4



Microsoft  
Strategy on  
1ES & GitHub

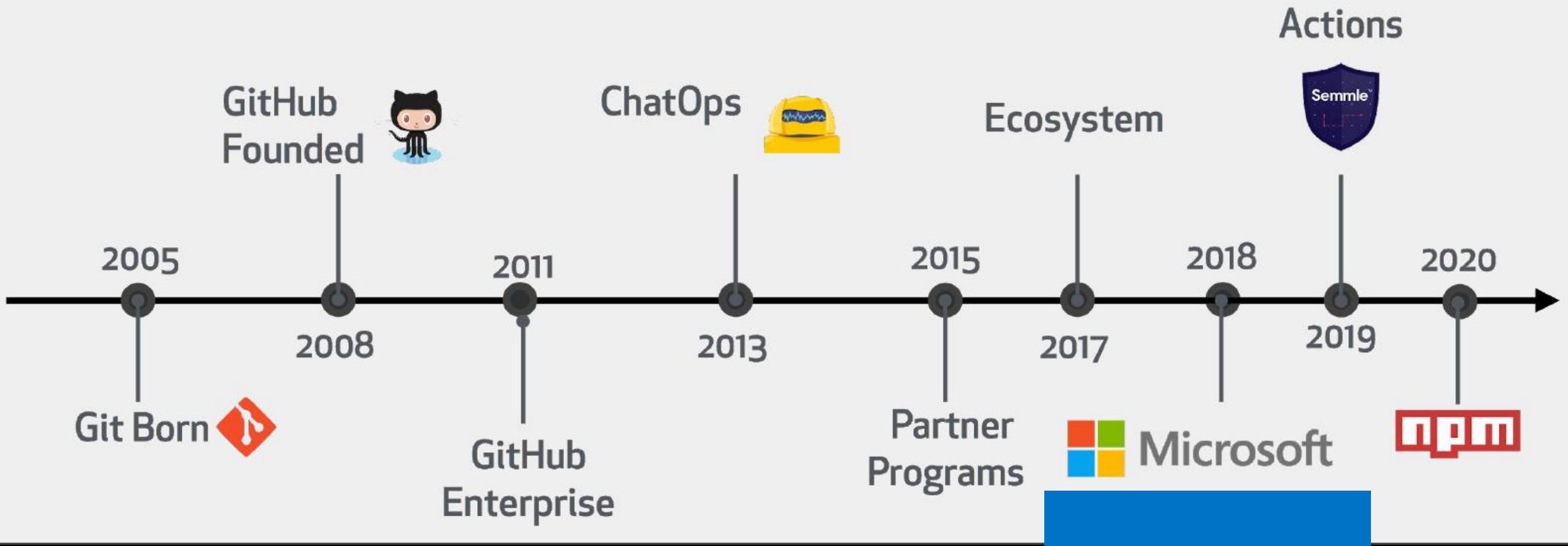
GitHub Culture



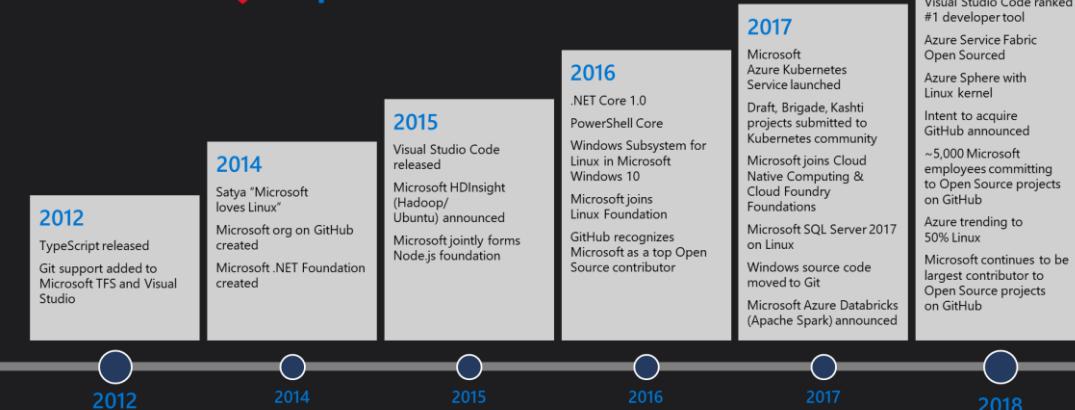


“...one of the things GitHub does is it  
drives the agility of your  
development...**GitHub is a way of life.**”

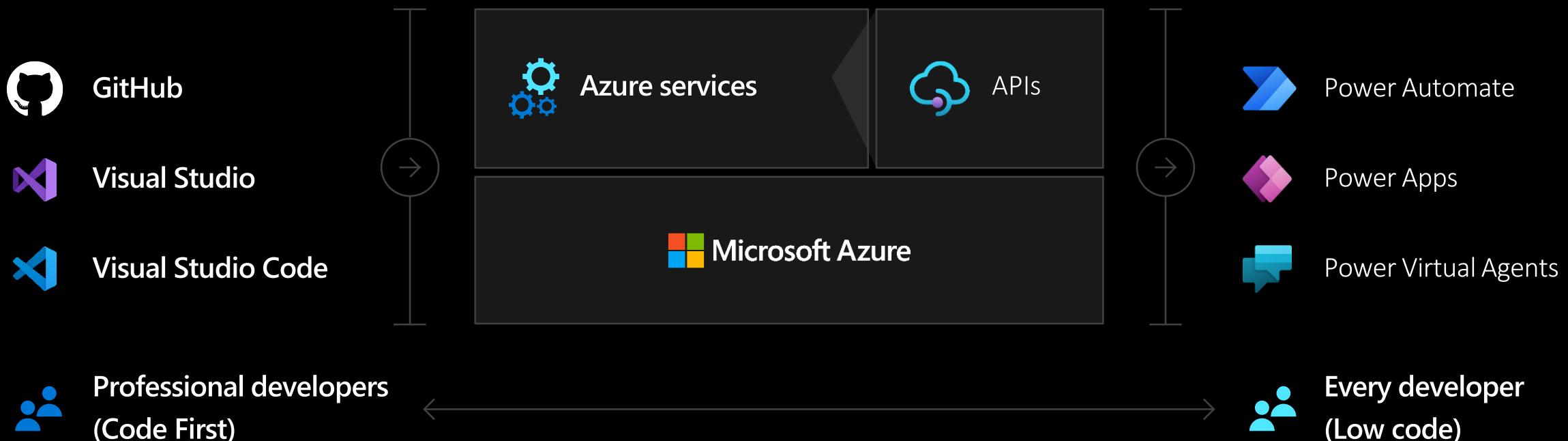
Satya Nadella  
*Chief Executive Officer*  
*Microsoft Corporation*



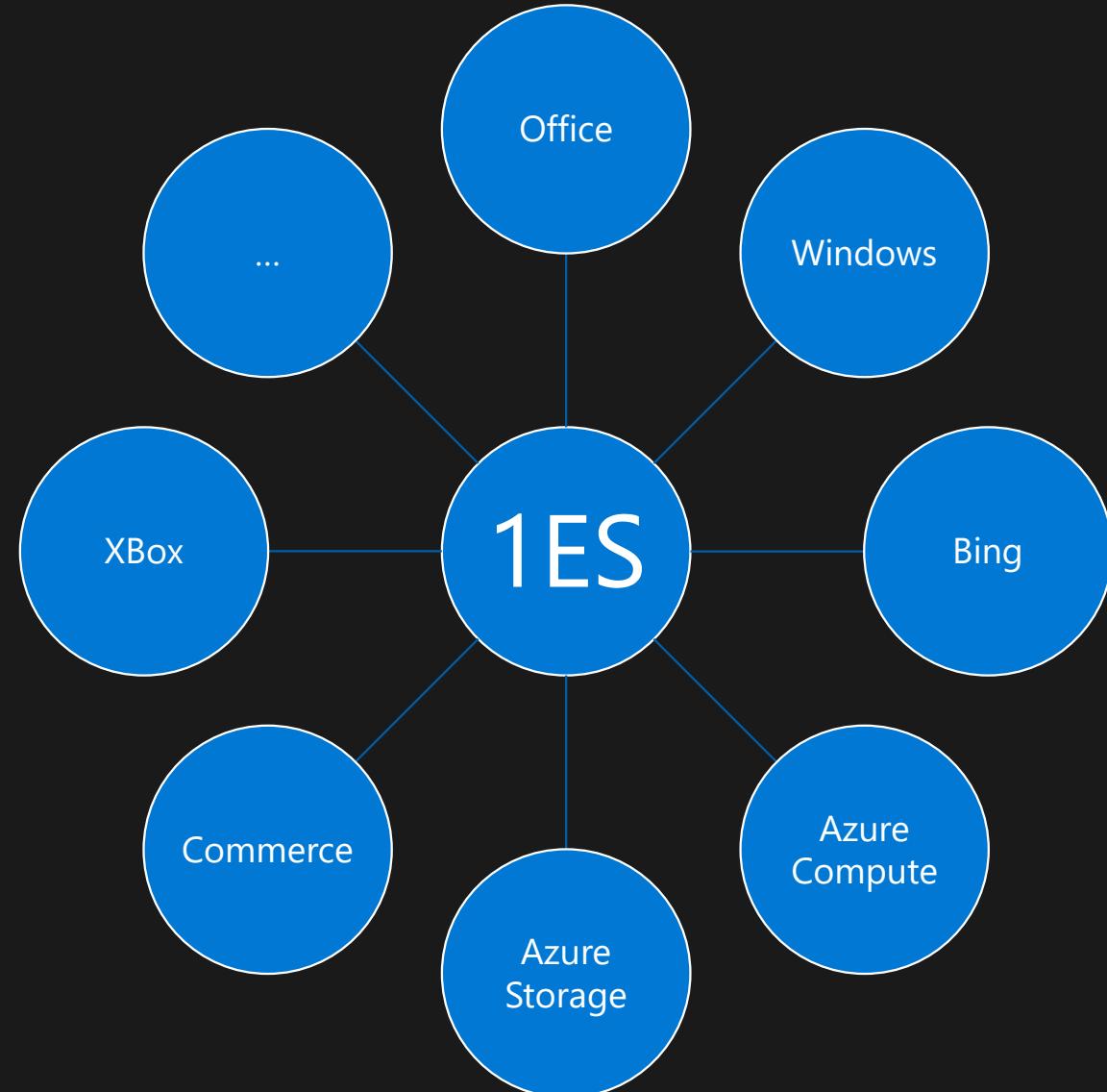
Microsoft ❤️ Open Source



# Complete toolchain for Developers



# 1ES & Engineering System Landscape at MSFT



# 1ES on GitHub

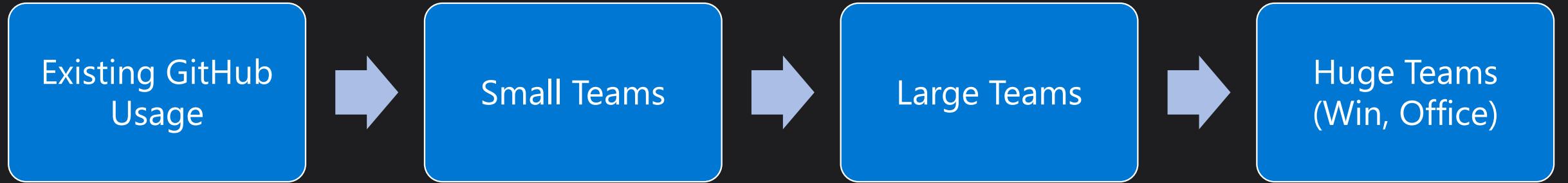


**Karl Piteira**  
1ES PRINCIPAL GROUP  
PM MANAGER

“

GitHub and Azure DevOps joined forces and are merging their efforts to make GitHub the best DevOps tool for the Enterprise. To achieve that goal, Microsoft will be the leading customer to use GitHub.

Using GitHub will be the opportunity to promote more collaboration through Inner-source software development practices and building on the wild success of GitHub in the Open-source.



## GitHub inside Microsoft (GiM) Strategy

Experience Migration Sequence

Build a Secure and Compliant end-to-end experience

# DevOps across Microsoft

→ <http://aka.ms/DevOps-Stories>

**165K**

Monthly Engaged  
Users (MEU)

**27+k**

Repos: GitHub  
& Azure Repos

**10.1M**

Builds per month

**3.4M**

Git commits  
per month

**373K**

Pull Requests  
completed per month

**1.7M**

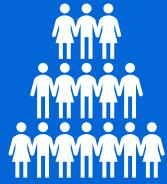
Work items  
created per month

**5,700,000**

Releases in August, 2021

# Why does GitHub matter to YOU?

#1



**Brand & OSS &  
Innersource &  
Community**

#2



**Developer  
Platform &  
Innovation**

#3



**Security  
Platform &  
Features**

#4



**Microsoft  
Strategy & App  
Innovate & 1ES**

**GitHub Culture**





Presented by [Garry]

# GitHub Culture

GitHub & Dojo Presentation 2022 (15 minutes)

Speed of change

Technology

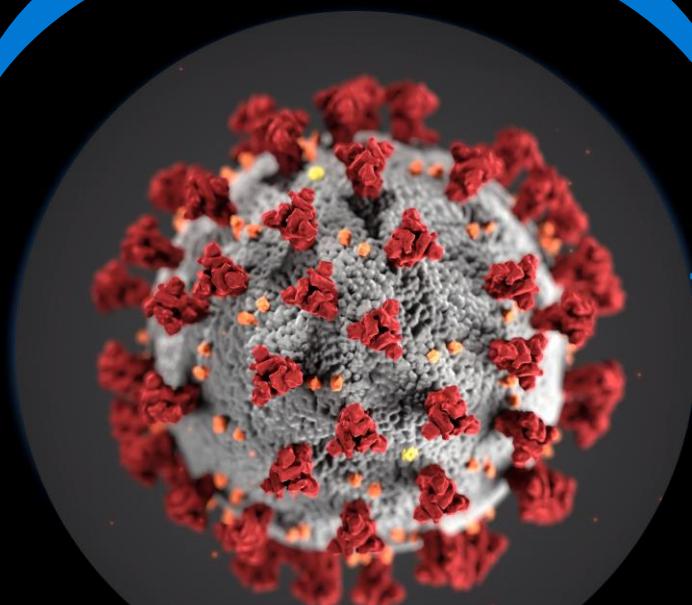
Commerce

Infrastructure

Governance

Culture

Nature

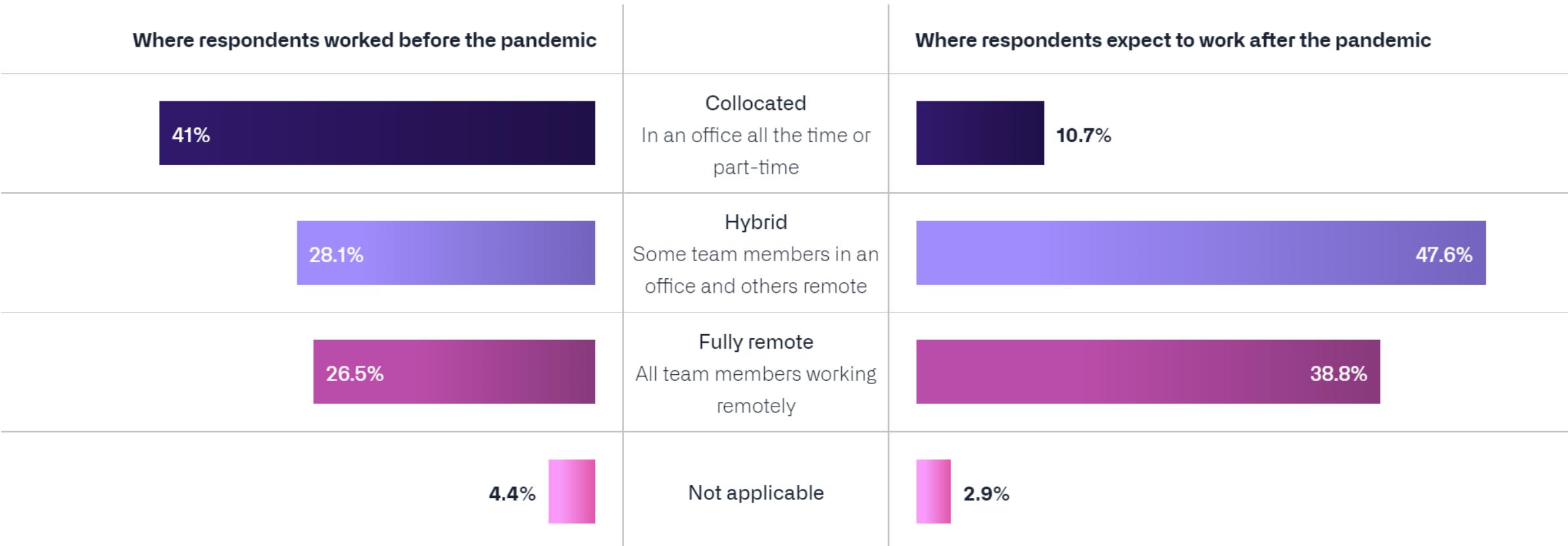


# Work is shifting

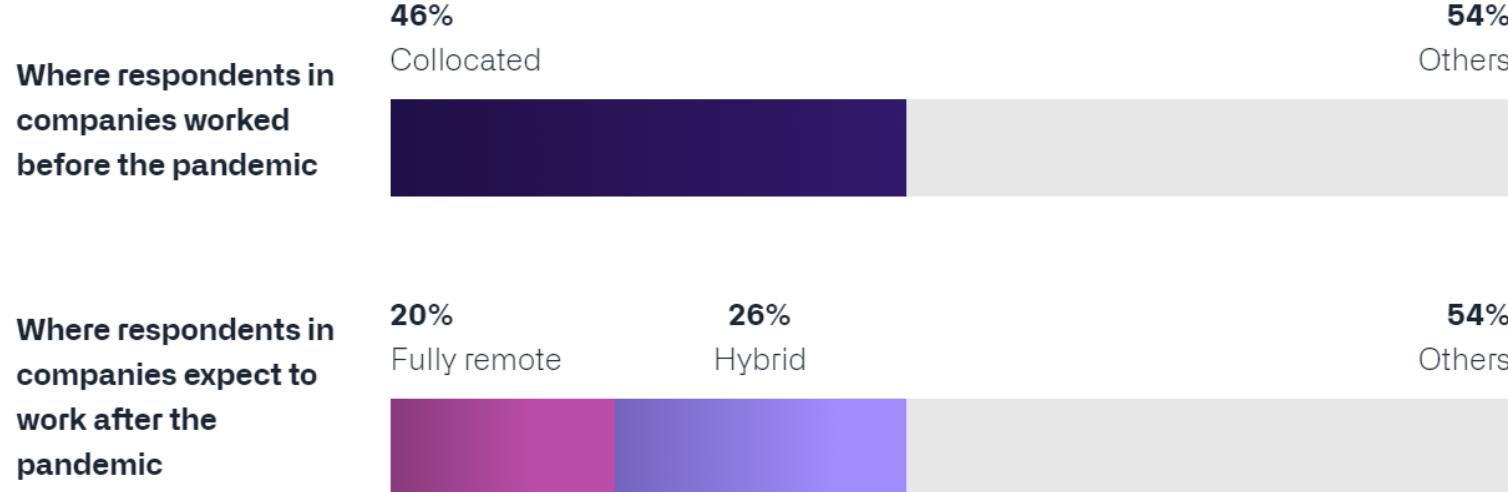
## Work before and after the pandemic



We present one decimal for simplicity; there may be a rounding difference of 1%.



# Work is shifting



When drilling down into the data we found the difference was more pronounced for folks in companies. Of those respondents working in companies, 46% who previously worked collocated now expect to work in a fully remote (20%) or hybrid (26%) environment.

# Westrum Culture & High Performing Teams

## Pathological



- Low cooperation
- Messengers shot
- Responsibilities shirked
- Bridging discouraged
- Failure → scapegoating
- Novelty crushed

## Bureaucratic



- Modest cooperation
- Messengers neglected
- Narrow responsibilities
- Bridging tolerated
- Failure → justice
- Novelty problems

## Generative



- High cooperation
- Messengers trained
- Risks are shared
- Bridging encouraged
- Failure → inquiry
- Novelty implemented

# Role of culture



A positive team culture mitigates burnout during challenging circumstances.

From State of DevOps 2021 report

Team culture makes a large difference to a team's ability to deliver software and meet or exceed their organizational goals.



Inclusive teams with a generative culture experienced less burnout during the COVID-19 pandemic.

# GitHub supports high performing teams



Collaborative  
culture



Documentation,  
documentation,  
documentation ...



Automate all the  
things!



Empowering  
developers





## Trust and respect contribute to a strong culture

Pull requests are how development teams coordinate and build software together

## Collaborative culture

Teams with high trust are more likely to have a healthy collaborative culture -- 2x more likely in companies, and 3x more likely in open source.





## **Documentation, documentation, documentation...**

**Documentation is good for productivity and culture -- it's a win-win**

Developers see about a 50% productivity boost when documentation is up-to-date, detailed, reliable, and comes in different formats (e.g., articles, videos, forums).

**Document everything, if its not written down, it doesn't get done!**

“The palest ink is better than the best memory.”





**Automate all  
the things!**

## **Remove friction and repetitive tasks using GitHub Actions**

Teams merge almost 2x more pull requests per day than before (61% increase) and they merge 31% faster using Actions.

Teams perform 27% better in open source and 43% better at work, and developers report higher fulfilment.

Good automation helps teams communicate better and more clearly

**Automation and community help us build better,  
together.**





## Empowering developers

**Better tools helps developers feel empowered to do their work and feel fulfilled.**

Developers are almost 60% more likely to feel equipped to do their job when they can easily find what they need.

Plus, they can get an 11% productivity bump simply by having a team repo that is easy to search

Reuse of code is easy and doesn't introduce friction. Developers' performance at work can increase by up to 87% when reusing others



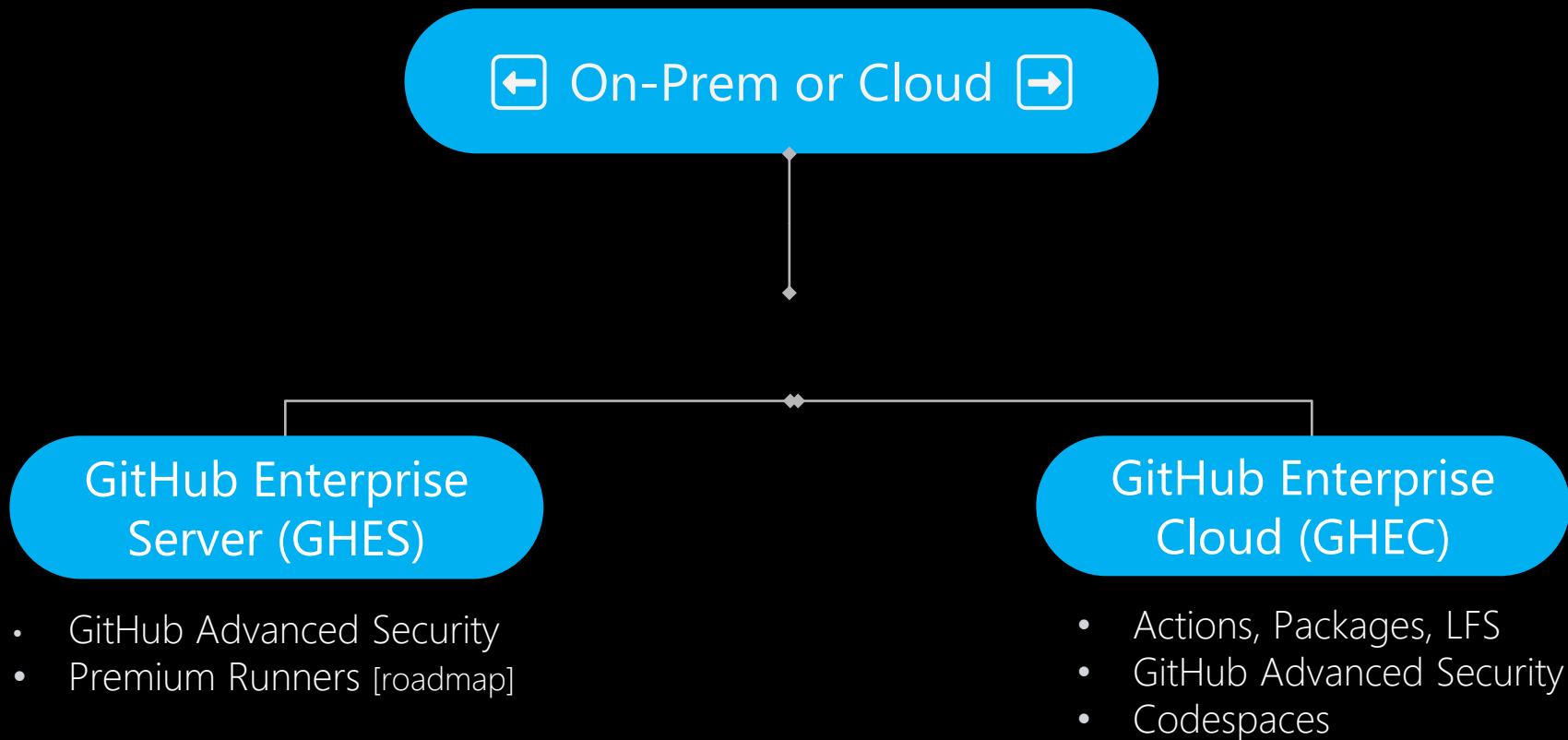


Presented by [Pierre]

# GitHub Products & Roadmap

GitHub & Dojo Presentation 2022 (15 minutes)

# Qualification Criteria





## GitHub Enterprise Cloud

- GitHub Issues
- GitHub Projects
- GitHub Codespaces
- GitHub Copilot
- GitHub Repos
- GitHub Actions
- GitHub Packages
- GitHub Apps
- GitHub Advanced Security
  - GitHub Code Scanning
  - GitHub Secret Scanning
  - GitHub OSS Scan
- GitHub Mobile
- GitHub Discussions

# Planning

Introducing the new GitHub Issues

## Project planning for developers

Create issues, break them into tasks, track relationships, add custom fields, and have conversations. Visualize large projects as spreadsheets or boards, and automate everything with code.

## Switch between Boards & Tables

Built like a spreadsheet, project tables give you a live canvas to filter, sort, and group issues and pull requests. Tailor them to your needs with custom fields and saved views.

## Issues, wherever you look

Issues can be viewed, created, and managed in your browser, your favorite terminal, or on your phone or iPad.

[Introducing the new GitHub Issues](#) | [The GitHub Blog](#) &  
[Issues Archives](#) | [The GitHub Blog](#)

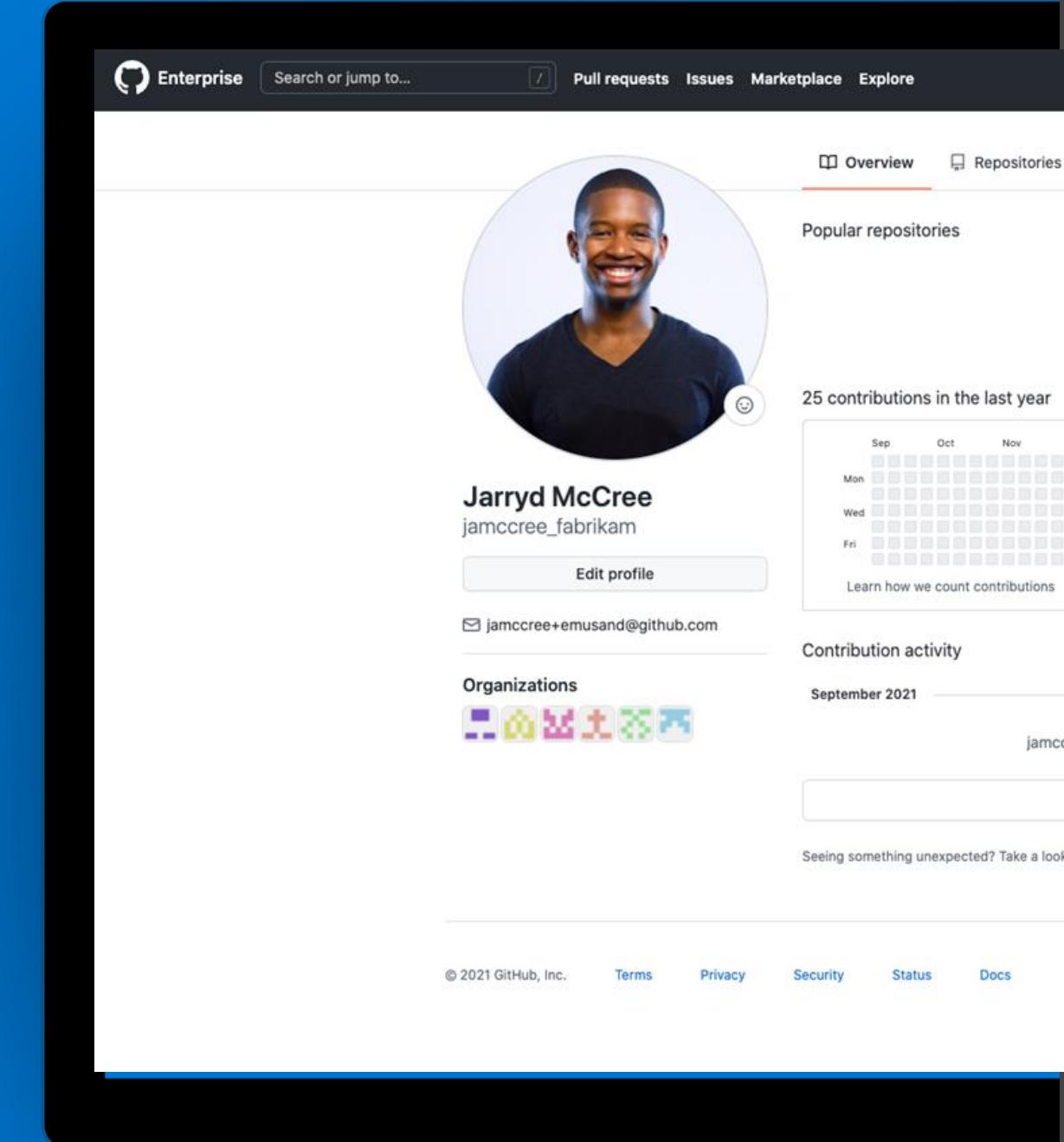
OctoArcade Invaders			
The Plan	Game loop Backlog	Standup	New view
Title	Team	Status	
Prototype 🛠️ 3			
1 Game brief and go-no-go	Producers 🎬	Comp	
2 Engine prototype (physics, rendering)	Engine ⚙️	Comp	
3 Initial concept art	Art 🌈	Comp	
+ Add item			
Beta 🌱 5			
4 Integrate with Leaderboard Service	Game Loop 📈	Not St	
5 Creative design update to aliens for variety	Art 🌈	Plann	
6 🚨 Updates to alien, beam, and cannon sprites	Art 🌈	Buildi	
7 Update to collision logic	Engine ⚙️	Buildi	
8 Improve alien respawn rate	Game Loop 📈	Behin	
+ Add item			
Launch 🚀 6			
9 Interviews with media outlets	Producers 🎬	Not St	
10 Save score across levels	Game Loop 📈	Not St	

# Enterprise Managed Users

Enterprise owned user accounts in the GitHub Cloud

- Full lifecycle ownership of user accounts
- Automated account management and team syncing with SCIM
- SAML backed and fully auditable
- No public repositories

[Enterprise managed users are now generally available for GitHub Enterprise Cloud | The GitHub Blog](#)



# Custom Repository Roles

## Create your own repository access roles

- Users and teams can have just the repository permissions they need to do their jobs
- Roles govern access to repositories, but are created at the organization level
- 40 permissions available today, with more to come based on feedback

[Enterprise organizations can now create custom repository roles | GitHub Changelog](#)

The screenshot shows the GitHub interface for creating a custom repository role. On the left, a sidebar lists various account settings: Account settings, Profile, Billing & plans, Member privileges, Organization security, Security & analysis, **Repository roles** (which is selected), Verified & approved domains, Audit log, Sponsorship log, Webhooks, Third-party access, Installed GitHub Apps, Scheduled reminders, Repository topics, Repository defaults, Deleted repositories, and Projects. To the right, the main content area is titled "Repository roles / Edit role". It says "Roles are used to grant access and permissions for teams and members. Begin adding permissions to create a role that fits your needs. [Learn more](#)". There is a "Name" field containing "Security Engineer", a "Description" field containing "To triage security scan results", and a note "A short description who this role is for or what permissions it grants". Below this, there is a section titled "Choose a role to inherit" with the note "All custom roles must inherit the permissions of a default role." A radio button for "Read" is unselected, while one for "Triage" is selected (indicated by a blue border). Other options include "Write" and "Maintain". Under "Add Permissions", there is a search bar with "code" typed in. A list of permissions follows: "Read code scanning results" (unchecked), "Write code scanning results" (unchecked), "Delete code scanning results" (unchecked), and "Assign or remove a user (inherited from Triage)". Below this is another section for "Issue Permissions" with the option "Close an issue (inherited from Triage)".

# Codespaces

Your instant dev environment

## Code without compromise

Code, build, test, debug, and deploy with a complete development environment in your browser.

## Contribute to repos quickly

Reduce the time to set up dev environments from hours per week to a couple of minutes.

## Extend and customize

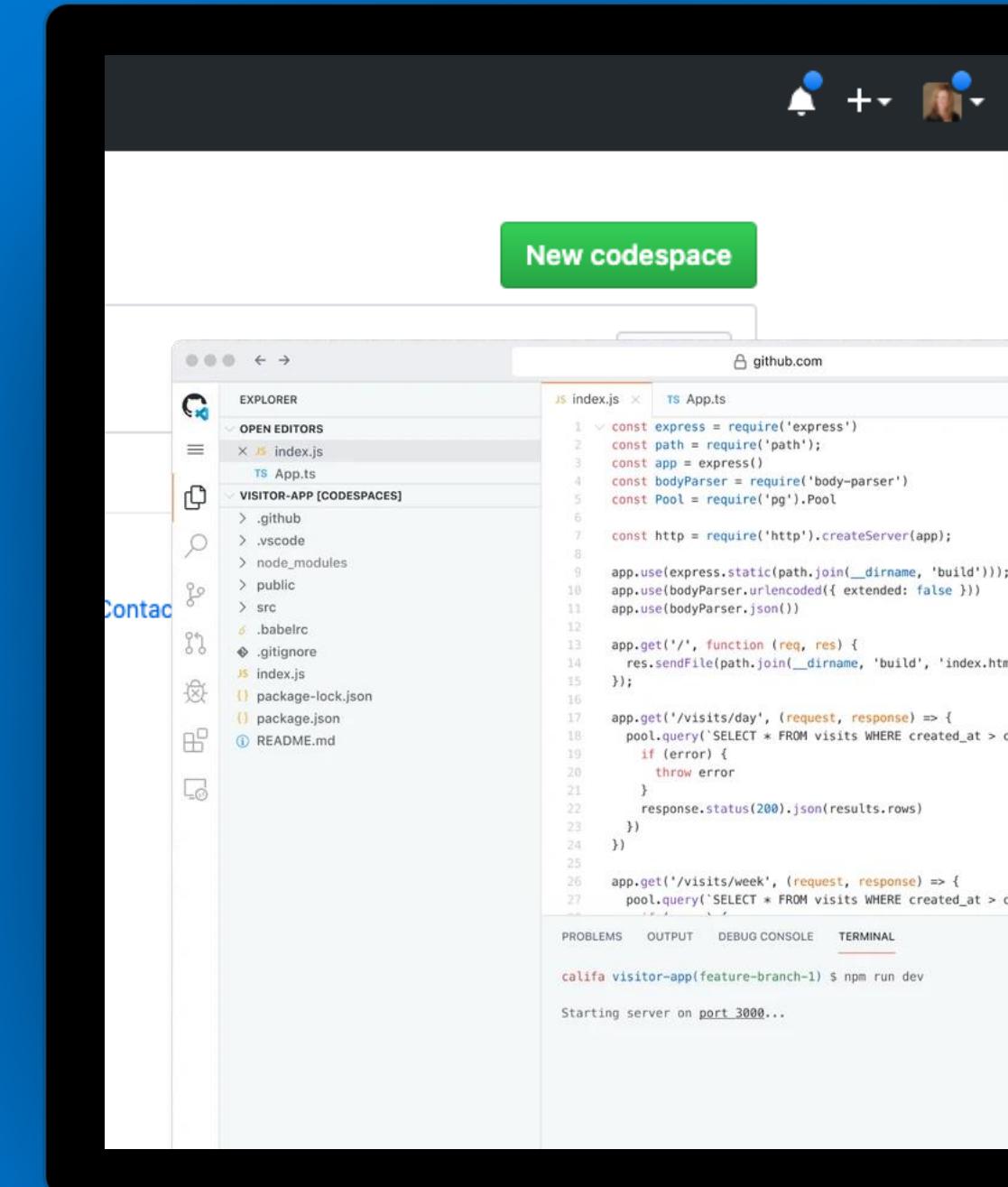
Configure your editor with dotfiles and VS Code extensions to create a consistent environment in every Codespace.

## Developer choice

Powered by web-based version of VS Code or, use with your desktop IDE.

<https://github.com/features/codespaces> &

<https://github.blog/2021-08-11-githubs-engineering-team-moved-codespaces>



# GitHub Copilot

Your AI pair programmer

## What is GitHub Copilot?

An AI pair programmer that helps you write code faster and with less work. GitHub Copilot draws context from comments and code, and suggests individual lines and whole functions instantly

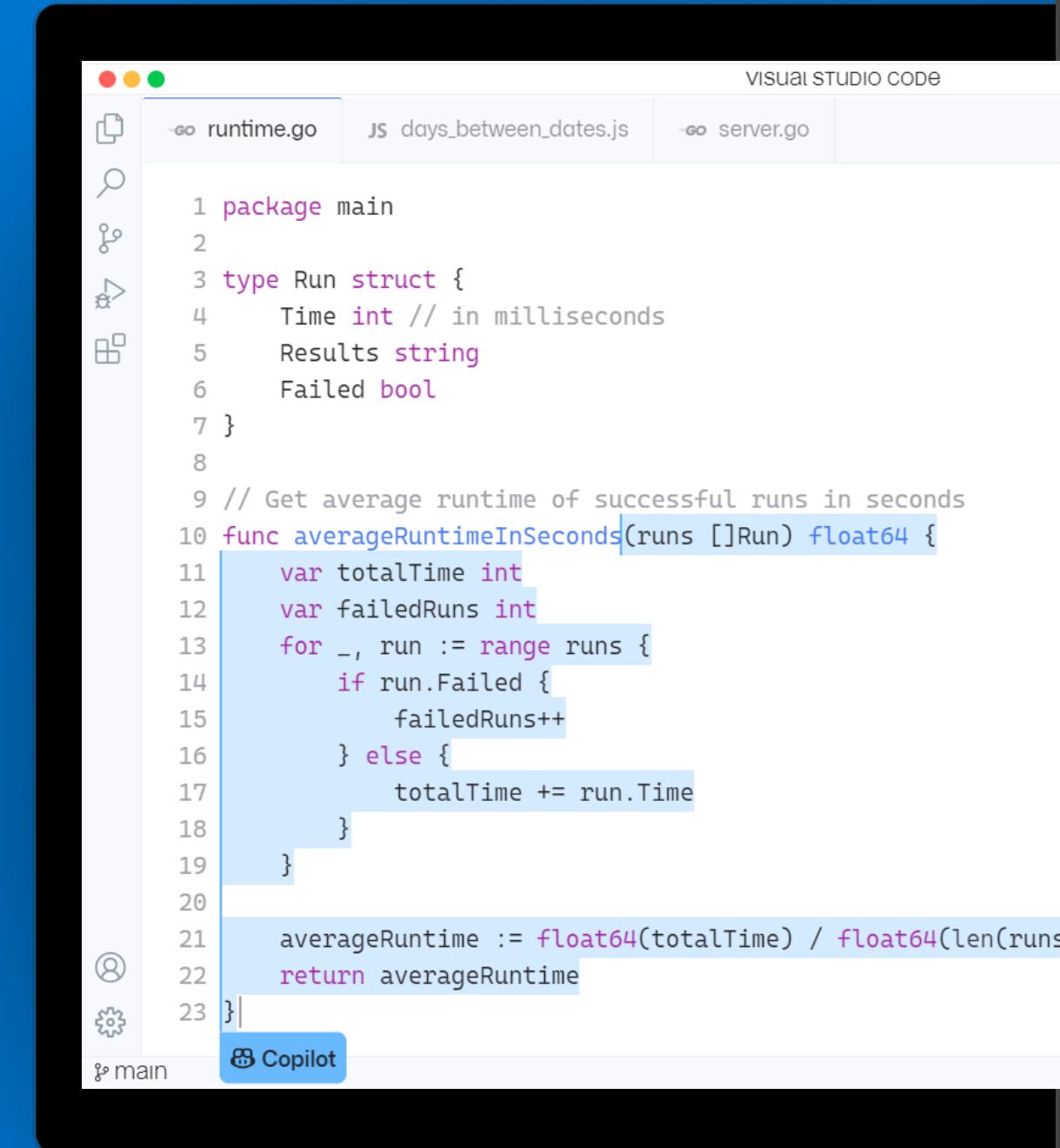
## Convert comments to code.

Write a comment describing the logic you want and let GitHub Copilot assemble the code for you.

## Tests without the toil.

Tests are the backbone of any robust software engineering project. Import a unit test package and let GitHub Copilot suggest tests that match your implementation code.

[Introducing GitHub Copilot: your AI pair programmer](#)



The screenshot shows a dark-themed instance of Visual Studio Code. In the center, there's a code editor window with several tabs at the top: `-go runtime.go`, `JS days_between_dates.js`, and `-go server.go`. The main editor area contains Go code:

```
1 package main
2
3 type Run struct {
4     Time int // in milliseconds
5     Results string
6     Failed bool
7 }
8
9 // Get average runtime of successful runs in seconds
10 func averageRuntimeInSeconds(runs []Run) float64 {
11     var totalTime int
12     var failedRuns int
13     for _, run := range runs {
14         if run.Failed {
15             failedRuns++
16         } else {
17             totalTime += run.Time
18         }
19     }
20
21     averageRuntime := float64(totalTime) / float64(len(runs))
22     return averageRuntime
23 }
```

A blue callout box labeled "Copilot" points to the line `averageRuntime := float64(totalTime) / float64(len(runs))`. The status bar at the bottom of the code editor says "Copilot". On the left side of the screen, there's a vertical sidebar with icons for file operations, search, and other VS Code features.

# GitHub Packages

Enterprise-grade repository to securely manage dependencies.

## Single, secure login for code and packages

Public and private registries, with support for multiple formats and ecosystems.

## Chain of custody

Find packages on GitHub, understand details and dependencies.

## Innersource and collaboration

Centralized, searchable source for approved and secure packages within your organization.

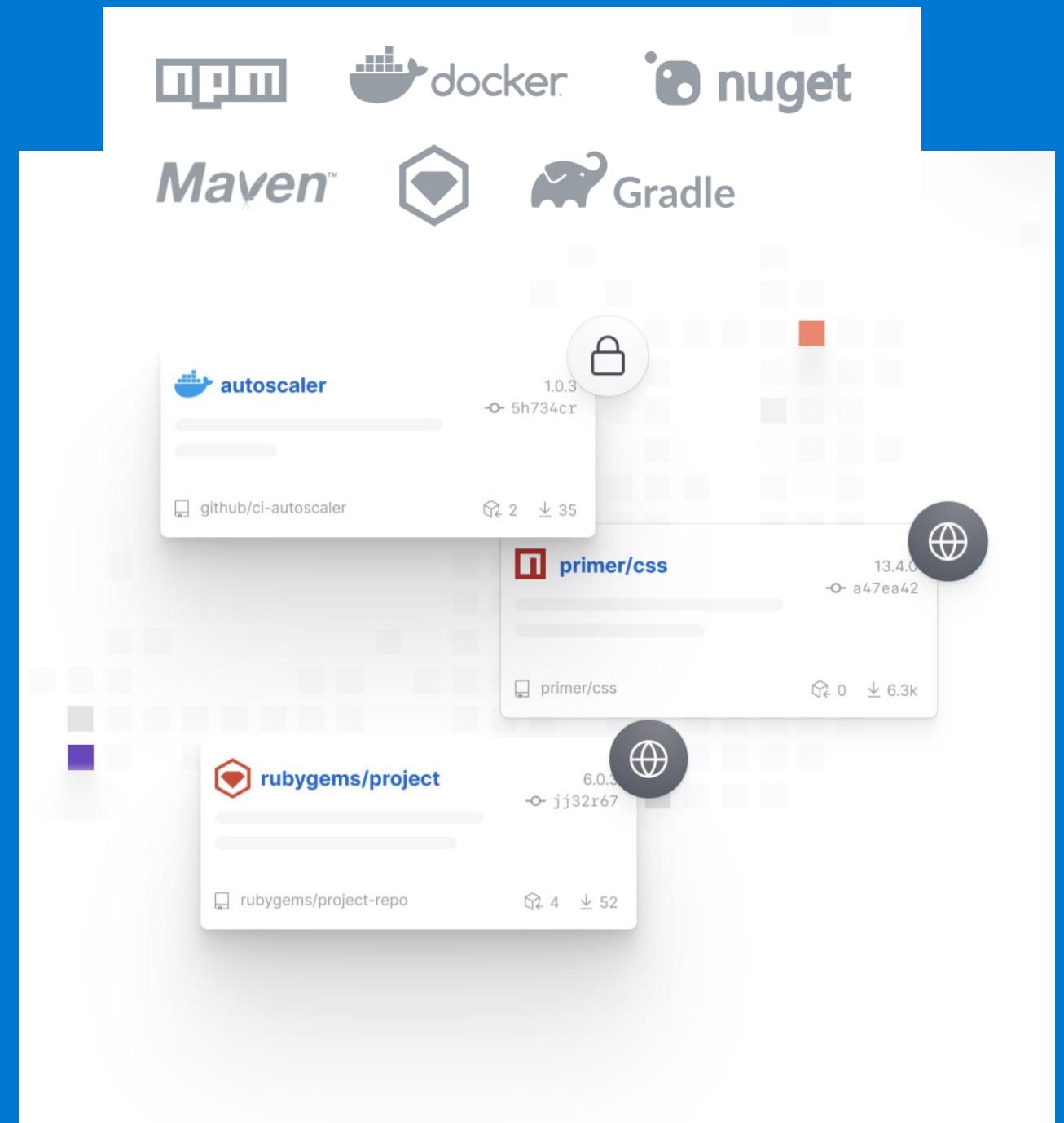
## CI/CD and Dependency Management

Works seamlessly with GitHub Actions.

Also works with your existing CI tool.

Use as a **Container Registry** with Helm Charts.

<https://docs.github.com/en/packages>



# Code Scanning

Preventing vulnerabilities from the start

## Find and fix vulnerabilities fast

Find and fix vulnerabilities before they are merged into the code base with automated CodeQL scans.

## Community of top security experts

Community-driven query set powers every project with a world-class security team. Or, create your own custom queries.

## Integrated with developer workflow

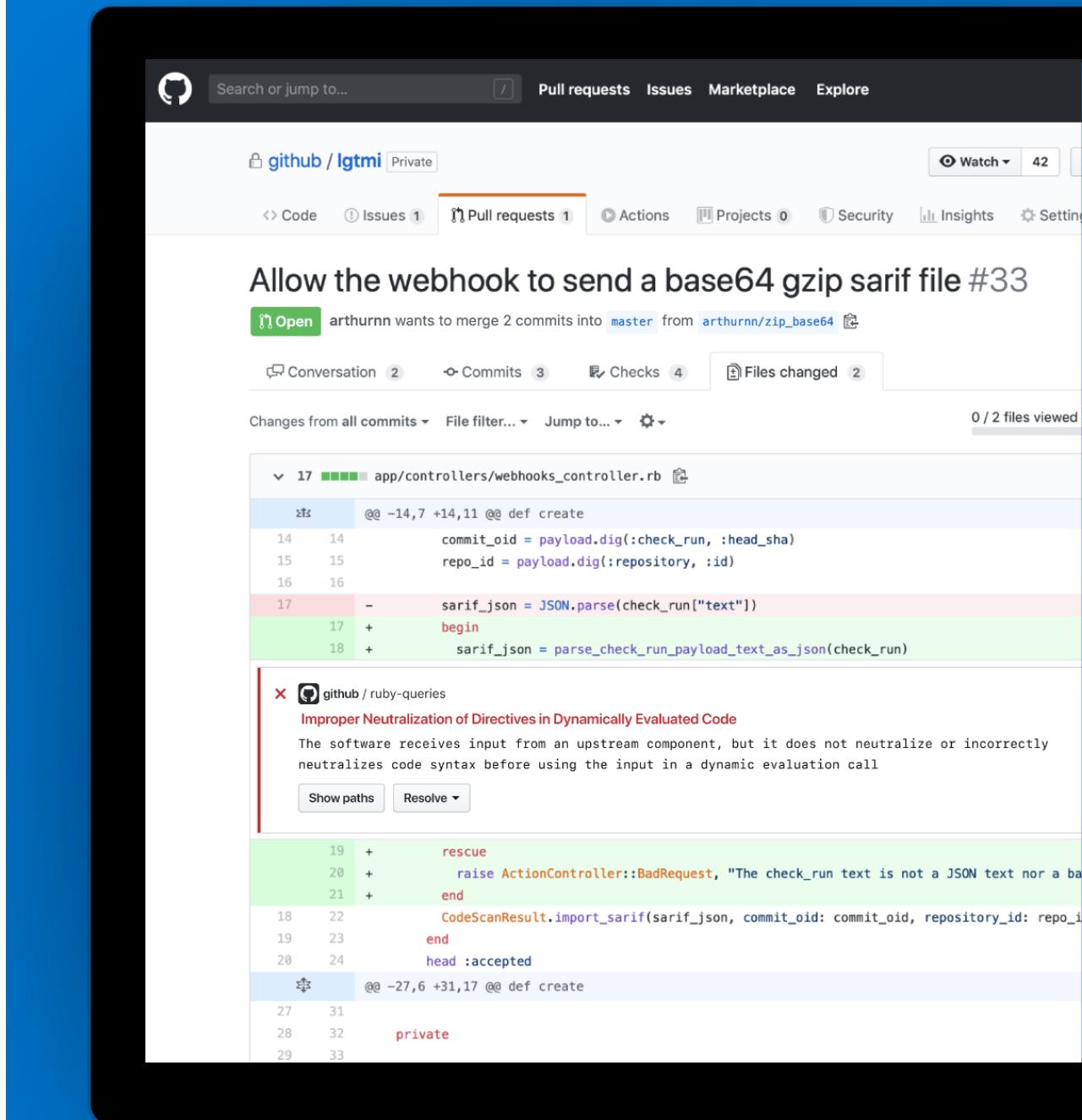
Integrate security results directly into the developer workflow for a frictionless experience and faster development.

## Extensible

Plug other SAST tools into the same developer workflow.

<https://github.com/features/security> &

<https://github.blog/2020-09-30-code-scanning-is-now-available/>



# Secret Scanning

Keeping your secrets, a secret

## Identifies secrets as early as possible

Finds secrets the moment they are pushed to GitHub and immediately notifies developers when they are found. Scan your entire git history.

## Community of secret scanning partners

For every commit made to your repository, and its full git history, we'll look for secret formats from secret scanning partners

## Supports both public and private repos

Secret scanning watches both public and private repos for potential secret vulnerabilities.

## Protection from exposed secrets

Automatically disable or suspend secrets from [45+ service providers](#) as soon as they are committed.

The provider list [continues to grow](#).

<https://github.com/features/security>

The screenshot shows the GitHub interface for a repository named "Anthophila / cagesellchen\_private\_token\_scanning". The "Security" tab is selected. A prominent alert for a "Samsara API Access Token" is displayed, stating "GitHub detected 11 days ago". The alert details that a Samsara API Access Token was committed to the repository. It recommends revoking and rotating the token. Below the alert, a timeline shows the detection of the secret in an "ignore.txt" file. The timeline entries are: "First instance of secret detected" (Create ignore.txt) and "More instances of secret detected" (Update README.md). At the bottom of the alert, there is a "Resolve this secret" button with options: "Secret has been revoked" (selected), "False positive", "Low risk / Used for testing", and "Won't fix". The footer of the page includes links for Terms, Privacy, Security, Status, Help, Site admin mode on, Report bug, Contact GitHub, Pricing, and API.

# Dependency Scanning & Auto Security Updates

Securing the software supply chain

## Dependency graph

See the packages your project depends on, the repositories that depend on them, and any vulnerabilities detected in their dependencies.

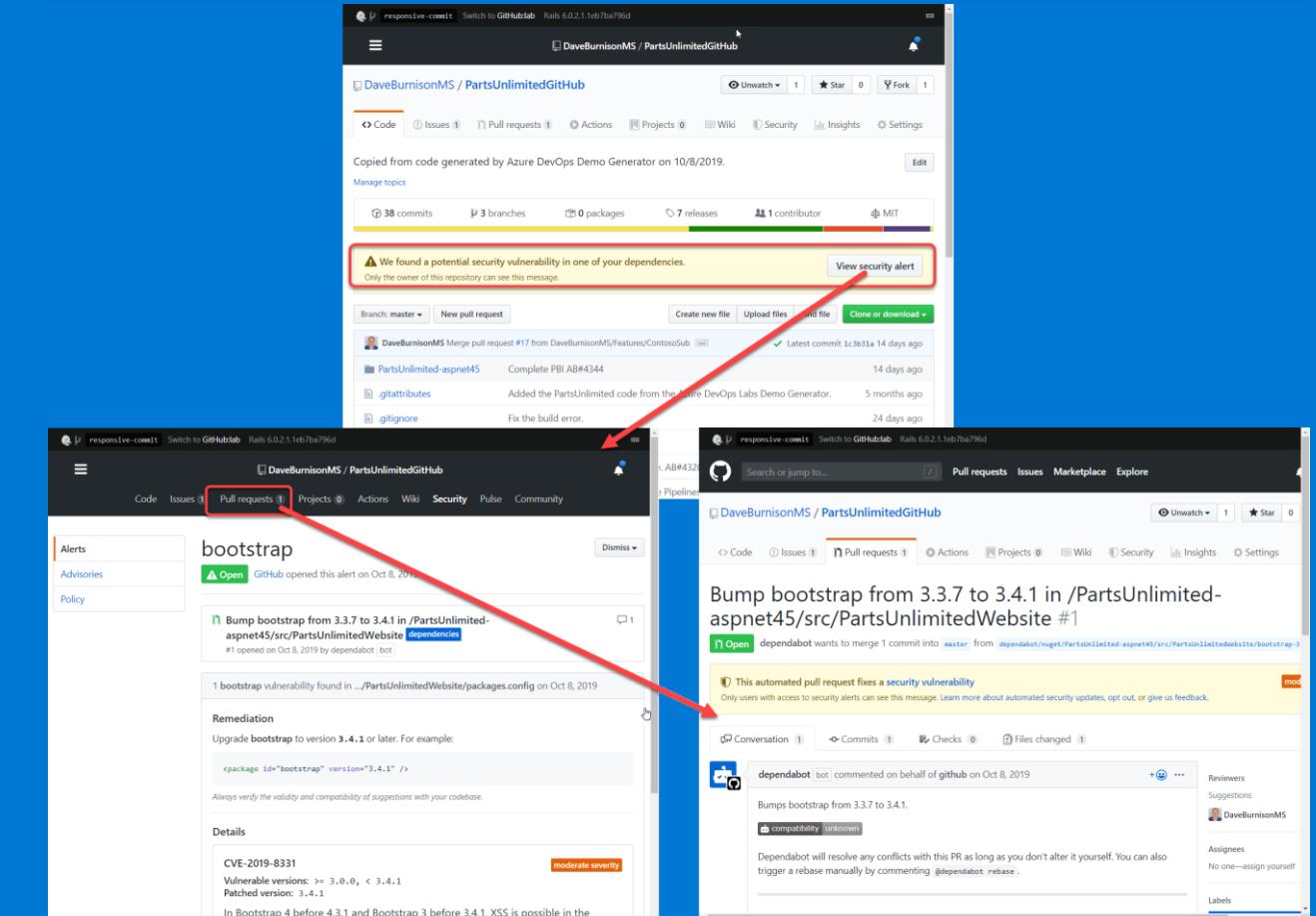
## Dependabot alerts

Get notified when there are new vulnerabilities affecting your repositories. GitHub detects and alerts users to vulnerable dependencies in public and private repos.

## Dependabot security and version updates

Keep your supply chain secure and up-to-date by automatically opening pull requests that update vulnerable or out-of-date dependencies.

<https://github.com/features/security>



# Automated Delivery

Automating workflows from code to cloud

## Accelerate delivery through automation

Automation triggers for 20+ project events allows for automation beyond just CI/CD to any available API

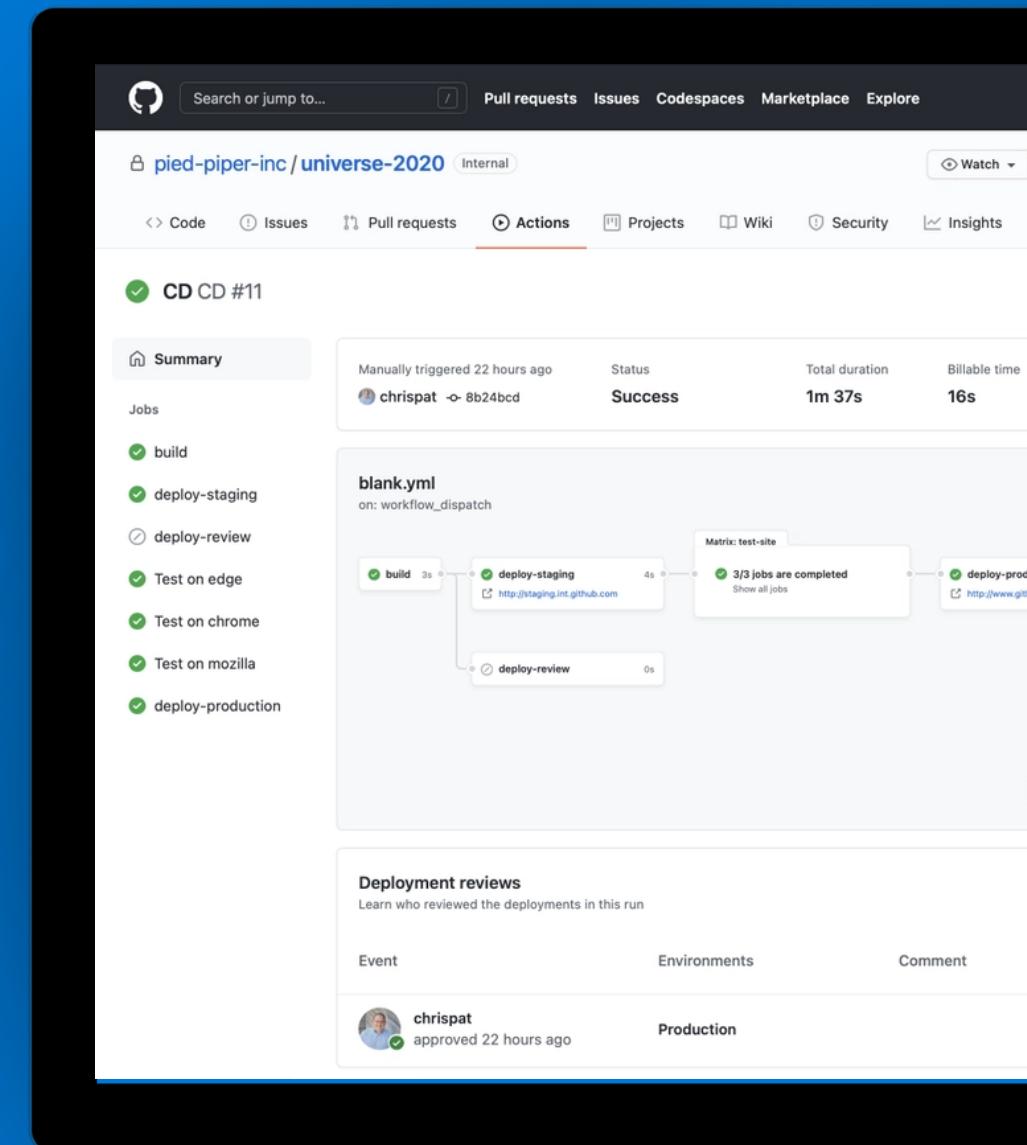
## Simple and easy to use

Configuration based on YAML with a host of sample workflows to learn from and get started

## Global community for actions

Thousands of open-source Actions, maintained by the community and by companies offering integrations, including Microsoft Azure

<https://github.com/features/actions> &  
[New from Universe 2020: Environments, Manual Approvals and Workflow Visualization](#)



# GitHub Actions for Azure

Over 120 ready-to-use actions for Azure

## Automate workflows:

Easily automate your code-to-cloud workflows on any GitHub event, such as code commits, creation of pull requests, or new GitHub releases. Deploy apps across popular languages and frameworks or, running on any OS.

## Shift security and compliance left:

Automate governance, security, and compliance into the early stages of the software development life cycle. Write infrastructure configurations, release pipelines, compliance, and security policies "as code" to enable continuous improvement and greater transparency.

## Operate seamlessly:

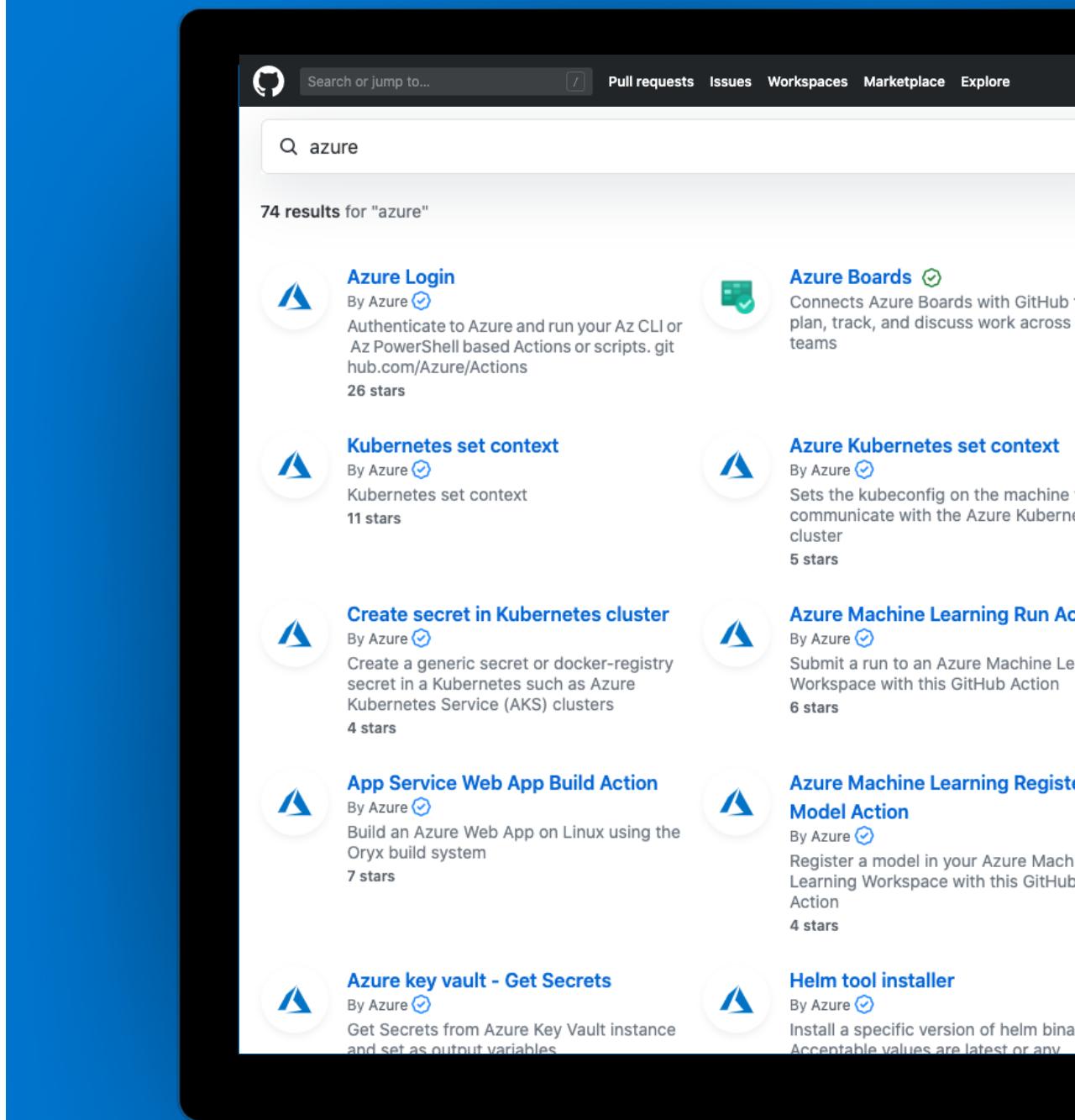
Shift from manual management and operation of IT environments to enable seamlessly automated IT management (GitOps) that is controllable, collaborative, and repeatable at enterprise scale.

## Accelerate developer velocity:

Deploy using popular developer tools integrated with GitHub Actions. Significantly reduce ramp-up time, avoid frequent context switching, and help teams be more productive with built-in extensions into Visual Studio Code, Azure CLI, and Azure Portal.

<https://azure.github.io/actions>

<https://github.com/marketplace?type=actions&query=Azure>



# GitHub Mobile

Collaborate and develop, on-the-go

## Stay connected

Stay in touch with your team and the GitHub Community, right from your mobile device

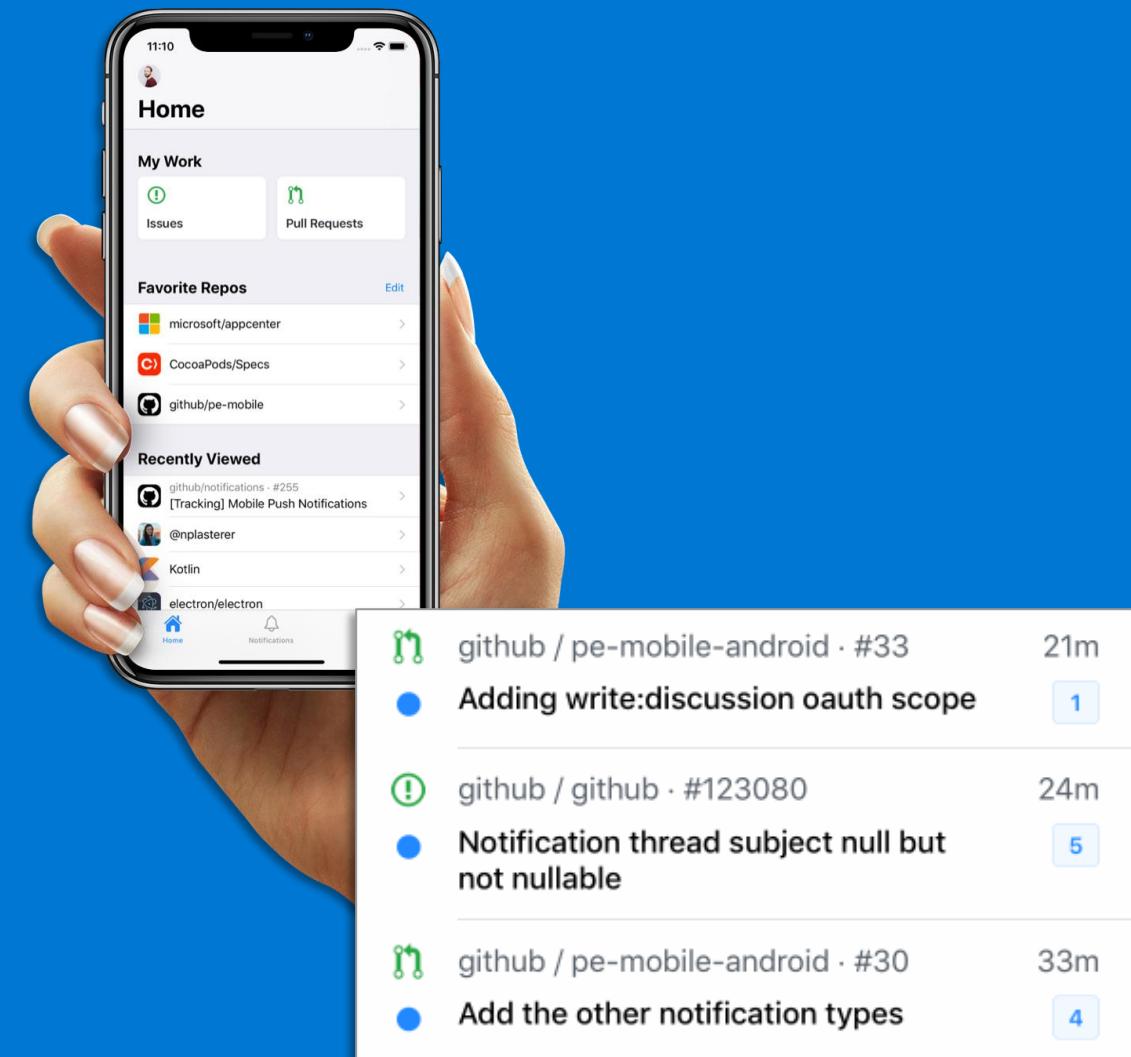
## Collaborate from anywhere

Collaborate on Issues and Pull Requests with a totally redesigned experience. Comment, react, and merge code.

## Breeze through your workflow

Get your inbox to zero in no time—swipe to finish a task or save the notification to return to it later.

<https://github.com/mobile/>



# Discussions

Join the conversation

## Open conversations about code and community

New threaded format makes it easy to brainstorm feature ideas, help new users get their bearings, and collaborate on software.

## Perfect for Q&A

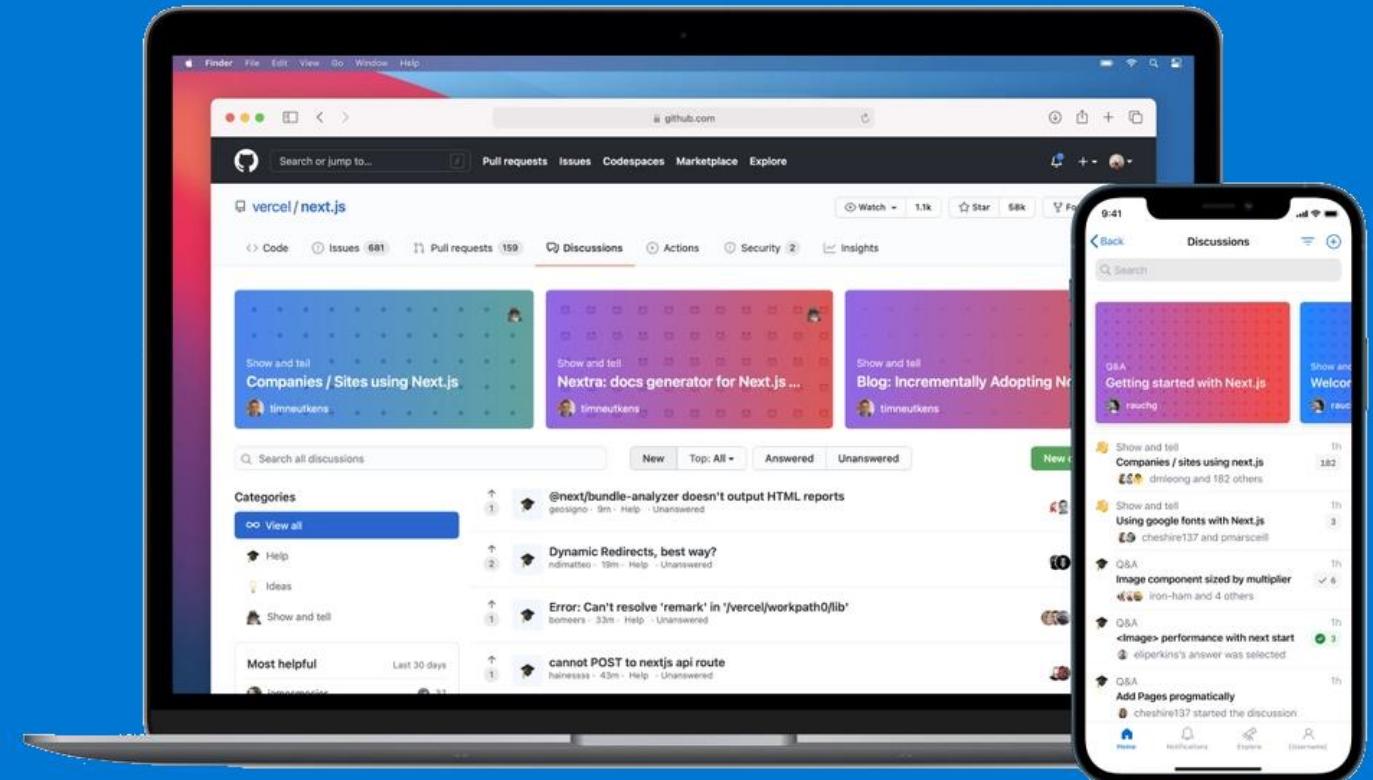
Questions can be marked as answered, so over time a community's knowledge base grows naturally

## Familiar GitHub experience

Discussions live in your project repository, so they're accessible where your community is already working together.

<https://docs.github.com/en/discussions>,

Example: <https://github.com/github/feedback/discussions>



# GitHub public roadmap

Search or jump to... / Pull requests Issues Marketplace Explore

GitHub public roadmap

Board Table Generally av... Cloud (githu... Server (GHE) GitHub Adv... GitHub Issues Give feedback

Filter by keyword or by field

Q4 2021 – Oct-Dec 31

- roadmap #248  
Releases Refresh and Automatically Generated Release Notes (Beta)  
all beta cloud code-to-cloud shipped
- roadmap #247  
Releases Refresh and Automatically Generated Release Notes (GA)  
all cloud code-to-cloud ga shipped
- roadmap #238  
Security Manager org-level role - cloud beta  
all beta cloud security & compliance shipped
- roadmap #219  
Optional expiration for Personal Access Tokens (Server)  
ecosystem ga github enterprise server shipped
- roadmap #215  
Dependency graph: Dependencies API (Private Beta)  
all beta cloud security & compliance shipped
- roadmap #212

Q1 2022 – Jan-Mar 49

- roadmap #257  
Actions: Reusable workflows on GHES (Beta)  
actions beta code-to-cloud github enterprise server
- roadmap #240  
Actions: macOS 12 (Monterey) on GitHub-hosted runners (Private Beta)  
actions all beta cloud code-to-cloud
- roadmap #220  
Actions: Limit self-hosted Runners to specific workflows  
actions cloud code-to-cloud ga github enterprise server
- roadmap #216  
Audit log API on GHAE and GHES  
ae beta github ae github enterprise security & compliance server
- roadmap #213  
GHEC Audit Log Streaming General Availability  
admin-cloud cloud ga github enterprise security & compliance shipped
- roadmap #193

Q2 2022 – Apr-Jun 18

- roadmap #256  
Actions: Reusable workflows on GHES (GA)  
actions code-to-cloud ga github enterprise server
- roadmap #255  
Actions: Limit self-hosted Runners to specific workflows on GHES  
actions code-to-cloud ga github enterprise server
- roadmap #254  
Actions: Use actions from internal repositories on GHES (Beta)  
actions beta code-to-cloud github enterprise server
- roadmap #237  
Git LFS moves to metered billing  
cloud ga github enterprise github team other
- roadmap #195  
API Versioning (GA)  
all ecosystem ga
- roadmap #58

Q3 2022 – Jul-Sep 1

- roadmap #207  
Kotlin security analysis support in CodeQL code scanning (beta)  
ae beta codeql github advanced security security & compliance server

Future 46

- roadmap #246  
Billing Usage API  
admin-cloud beta billing cloud github enterprise
- roadmap #245  
ISO 27001 Certification for Dotcom and GitHub Enterprise Cloud  
admin-cloud all cloud ga security & compliance
- roadmap #218  
Create a branch from an issue  
all in design planning
- roadmap #217  
Updated billing overview page  
admin-cloud all billing ga
- roadmap #211  
Pull request revisions and improved workflows  
all beta code
- roadmap #206  
Swift security analysis support in CodeQL code scanning (beta)  
ae beta codeql

# Roadmap UI walkthrough

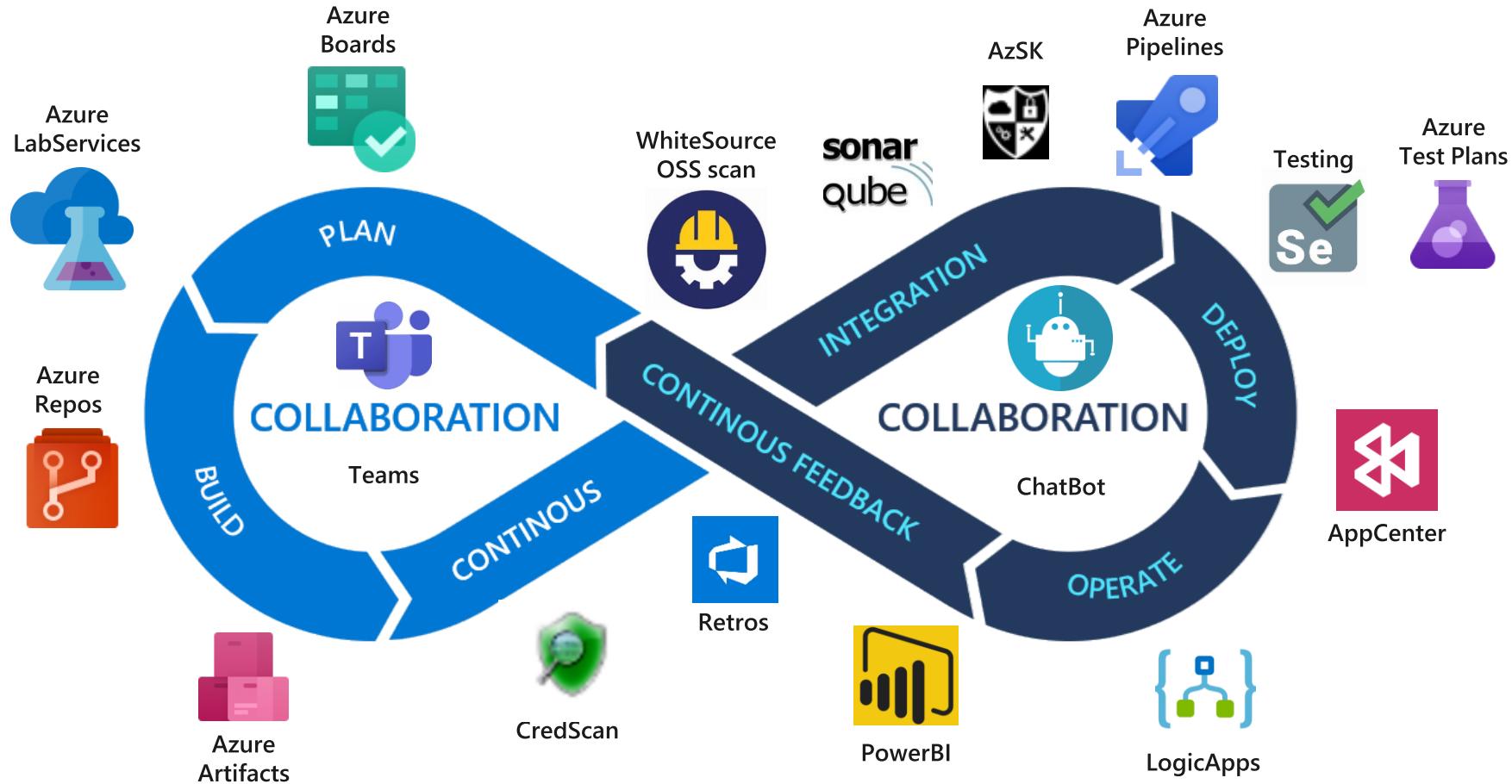


Presented by [Kan]

# Azure DevOps & GitHub Comparison

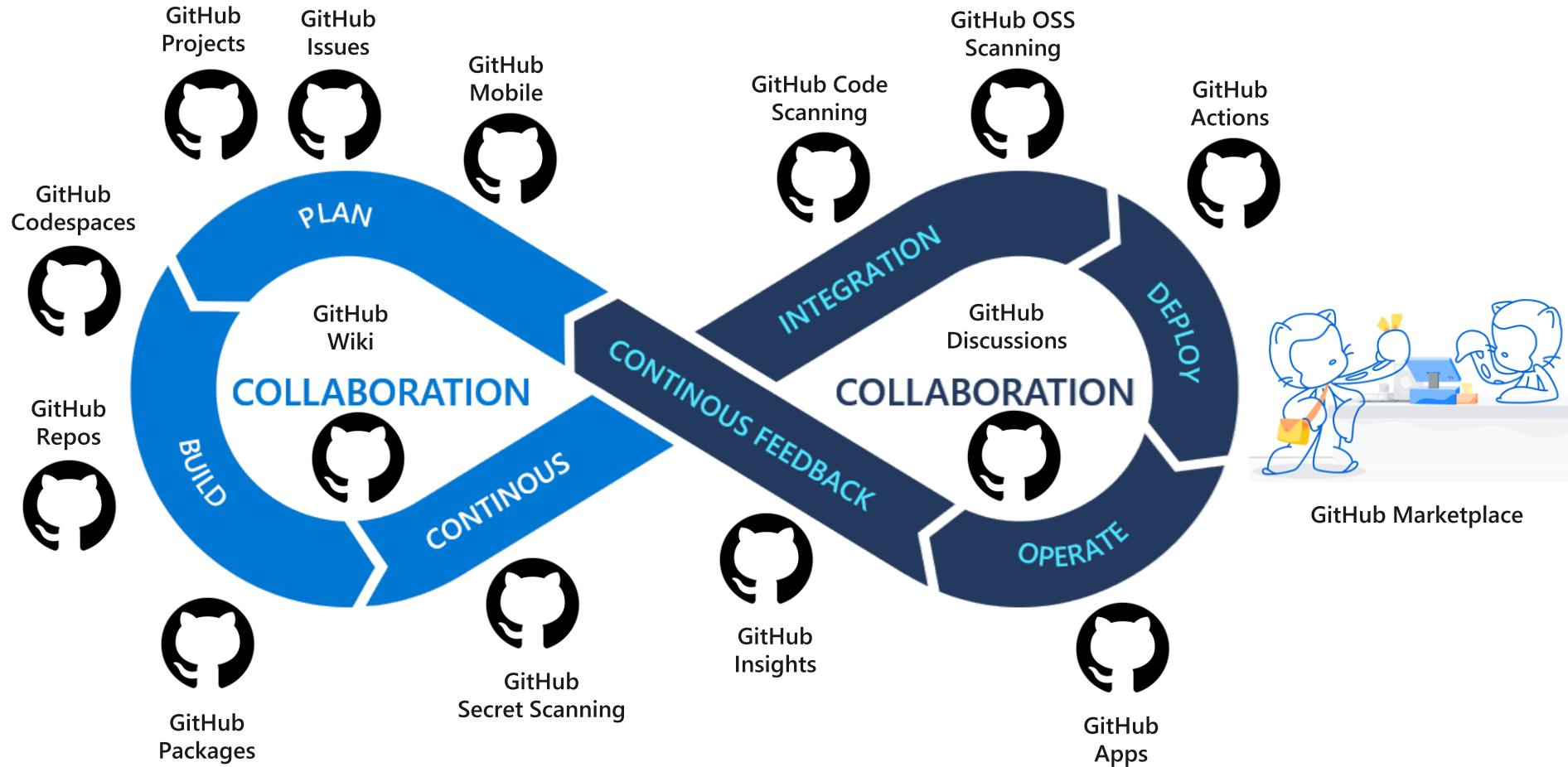
GitHub & Dojo Presentation 2022 (15 minutes)

# Reference Implementation with Azure DevOps

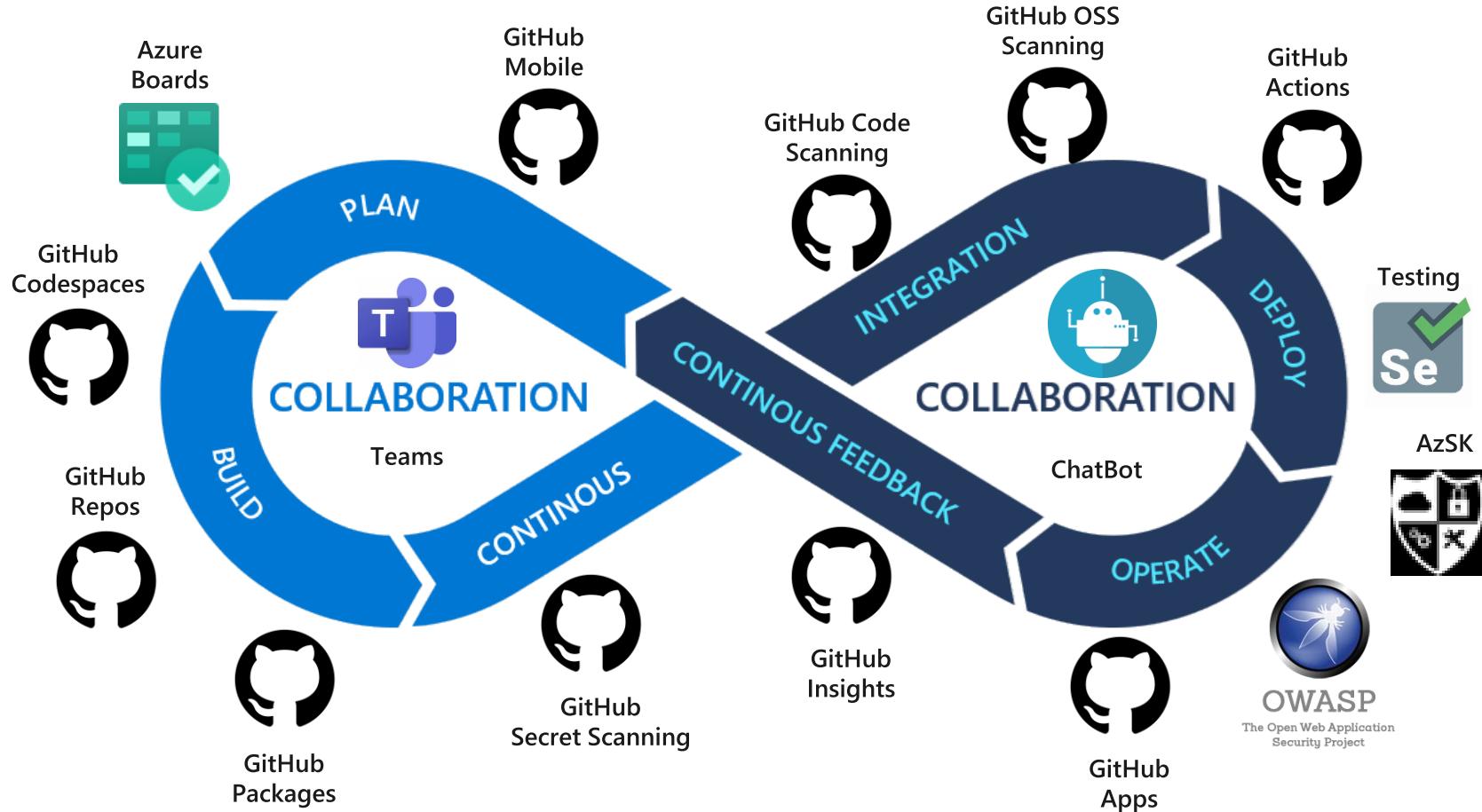


 Microsoft Azure

# Reference Implementation with GitHub



# Reference Implementation with GitHub + Azure DevOps

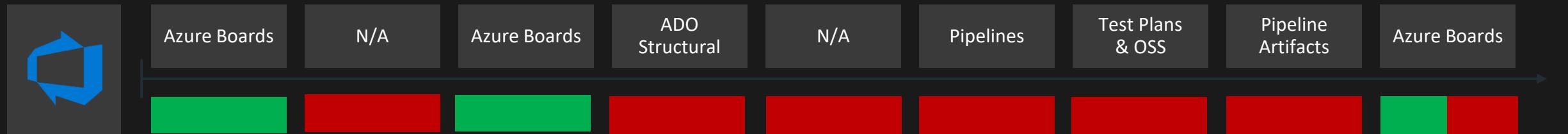
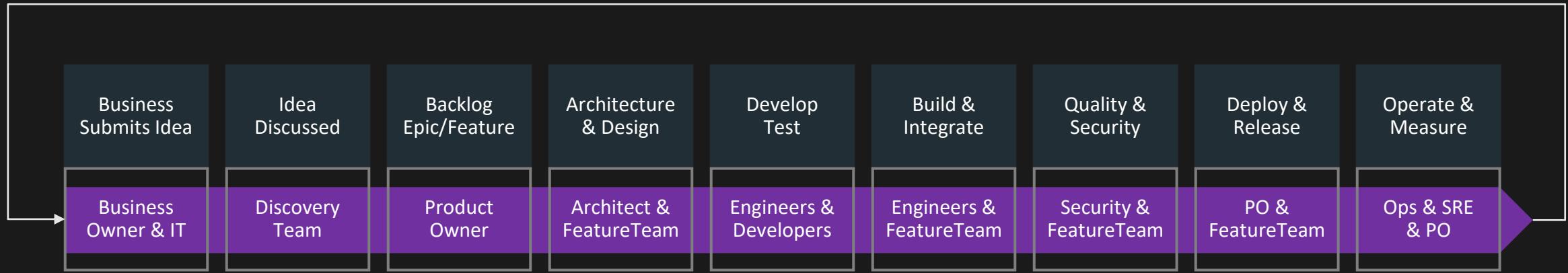


 Microsoft Azure

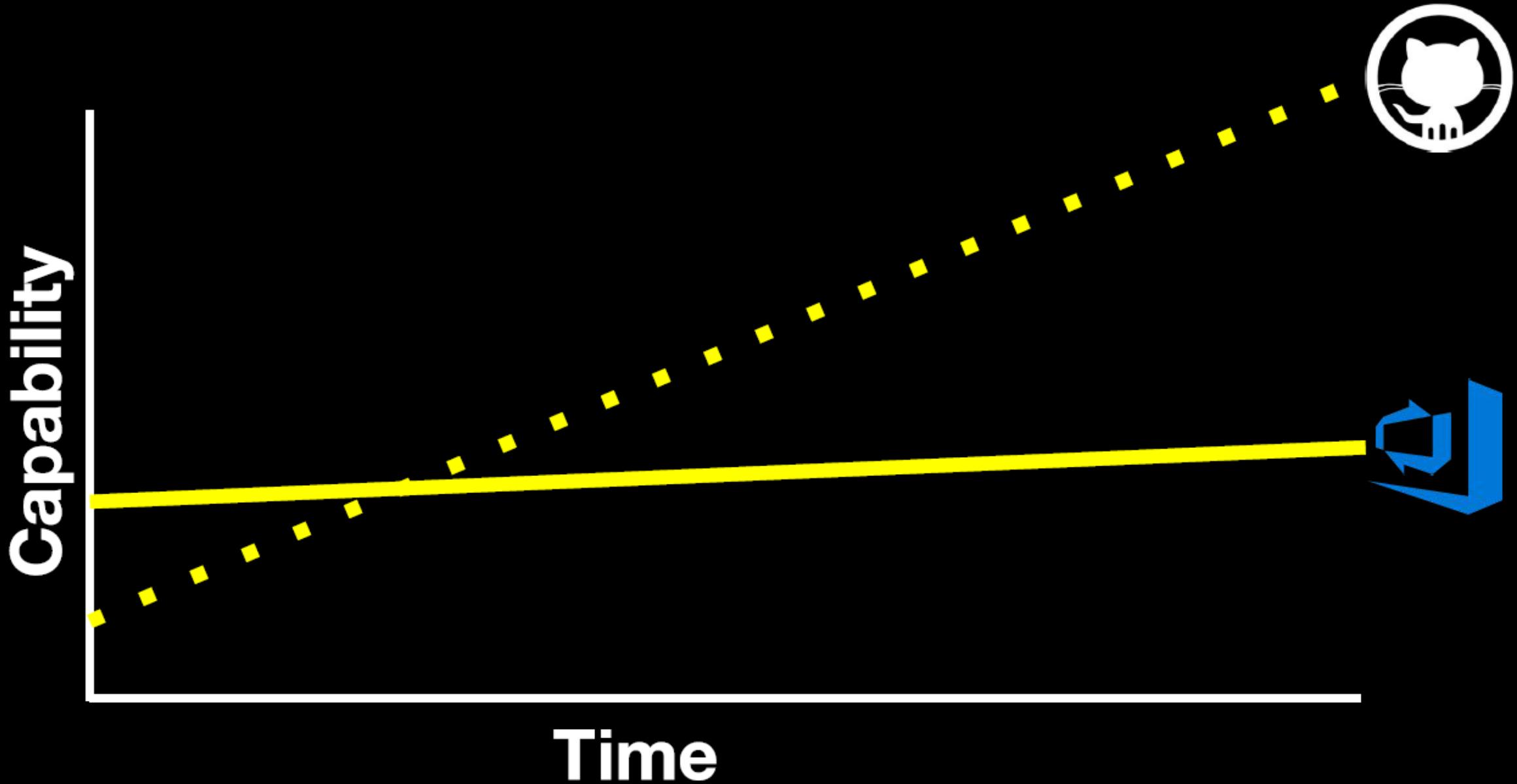
# GitHub vs. Azure DevOps as of Now

1<sup>st</sup> choice

2<sup>nd</sup> choice



# The Future



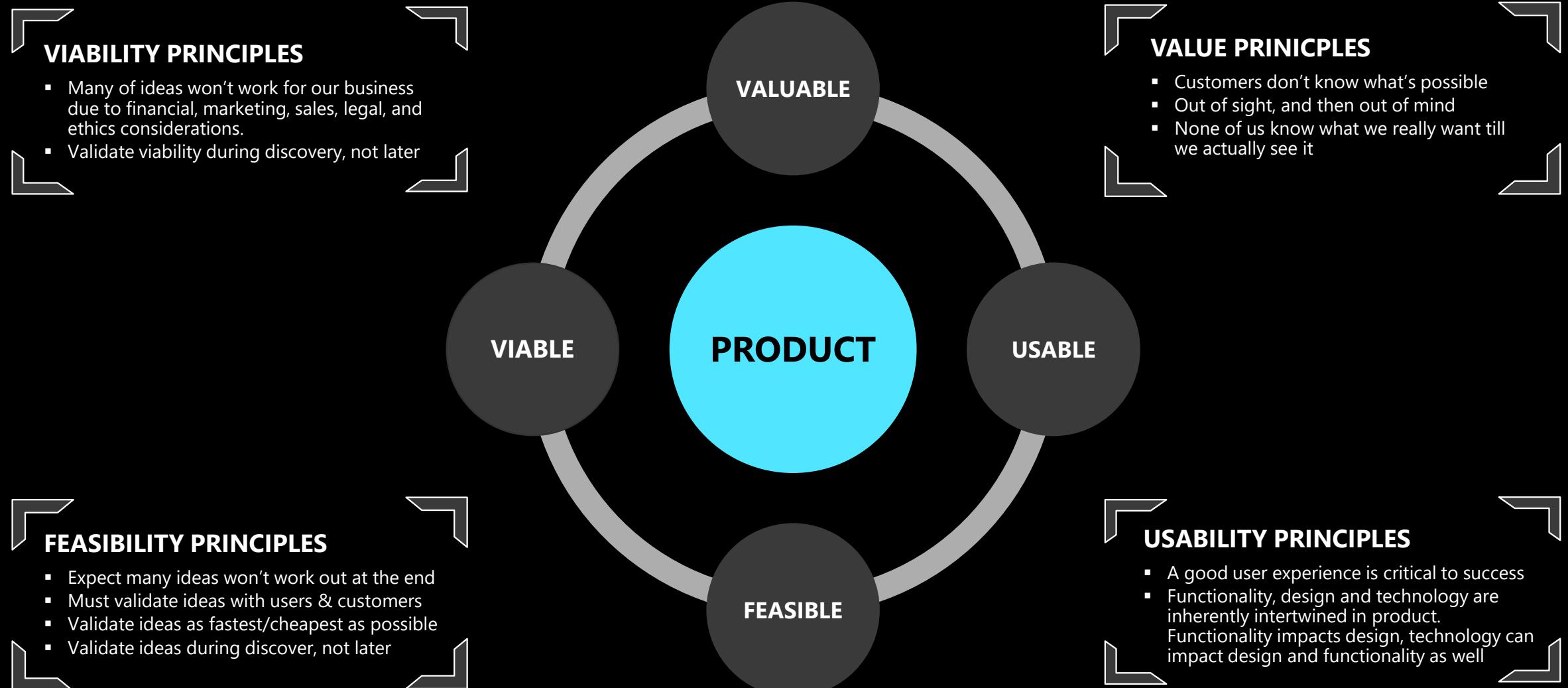
# What problems do we try to solve in DevOps?



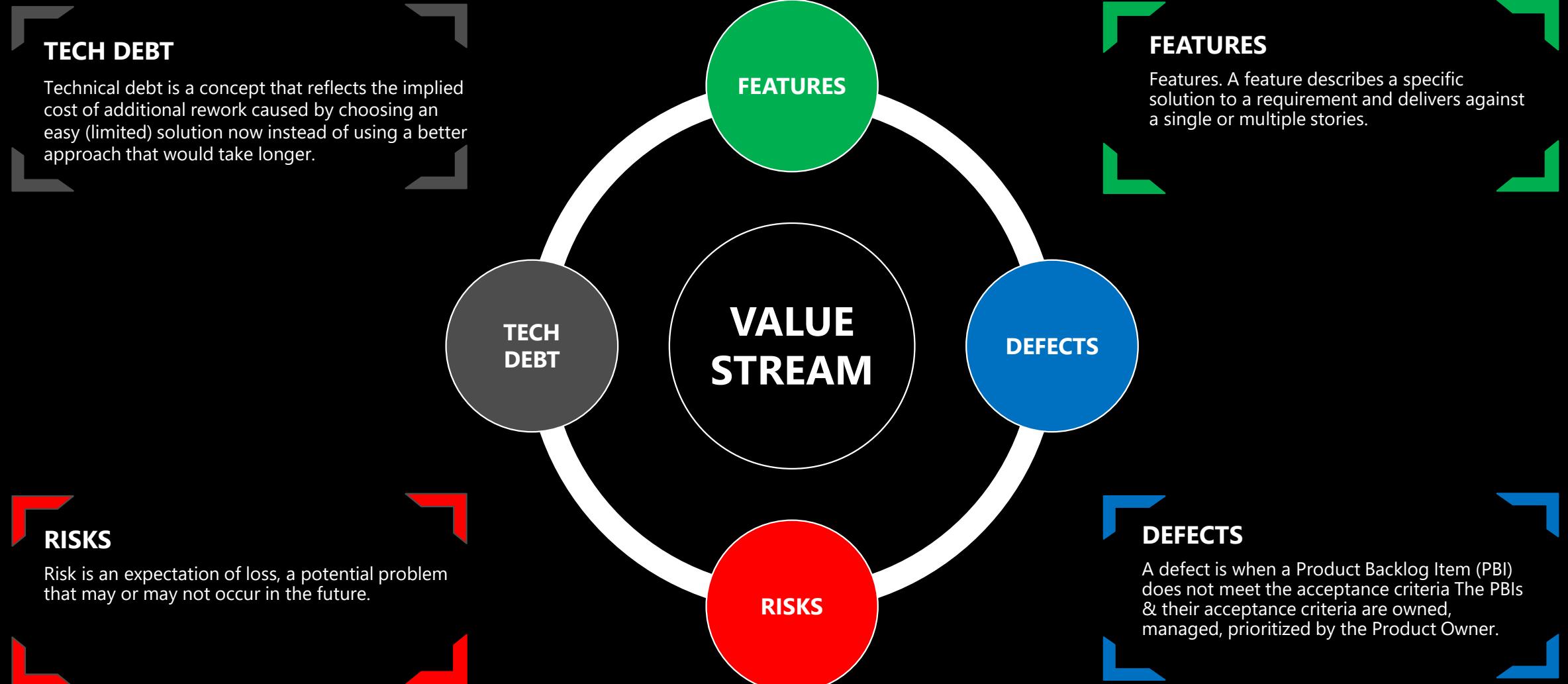
"If I had only one hour to save the world, I would spend fifty-five minutes defining the problem, and only five minutes finding the solution."

- Albert Einstein

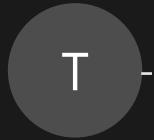
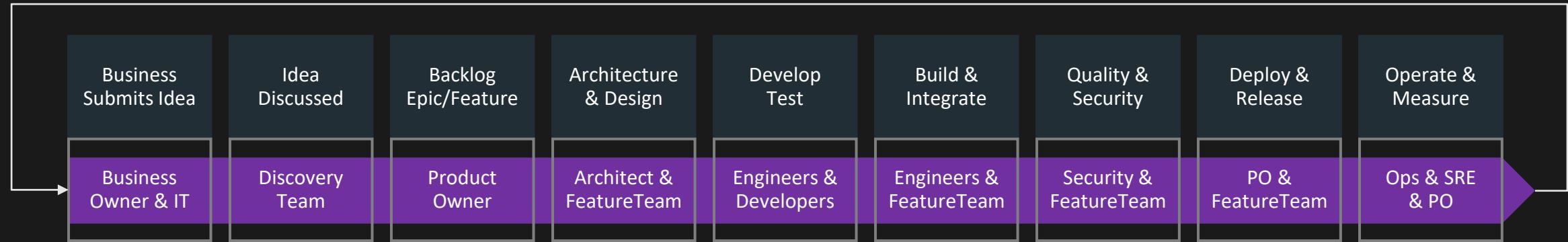
# DevOps and Product



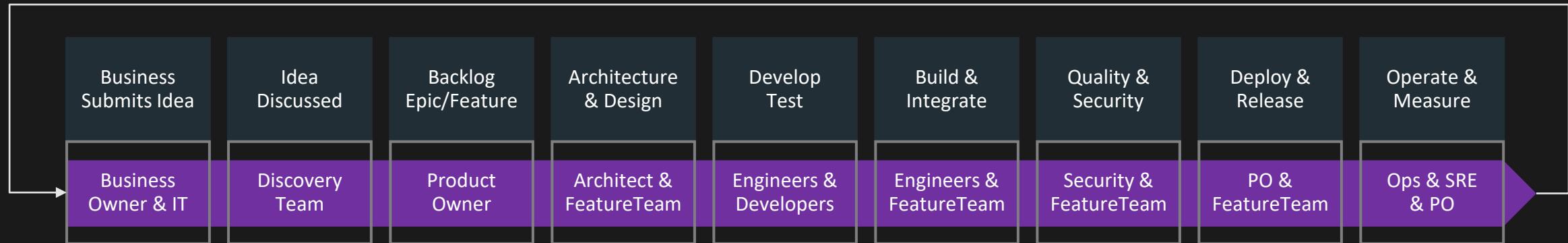
# Flow Distribution



# DevOps Value Stream Flow



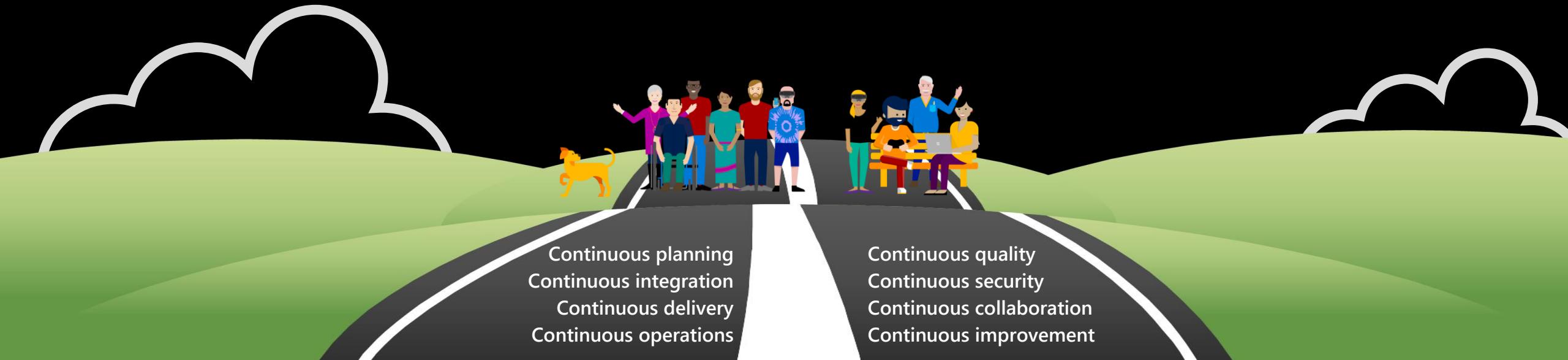
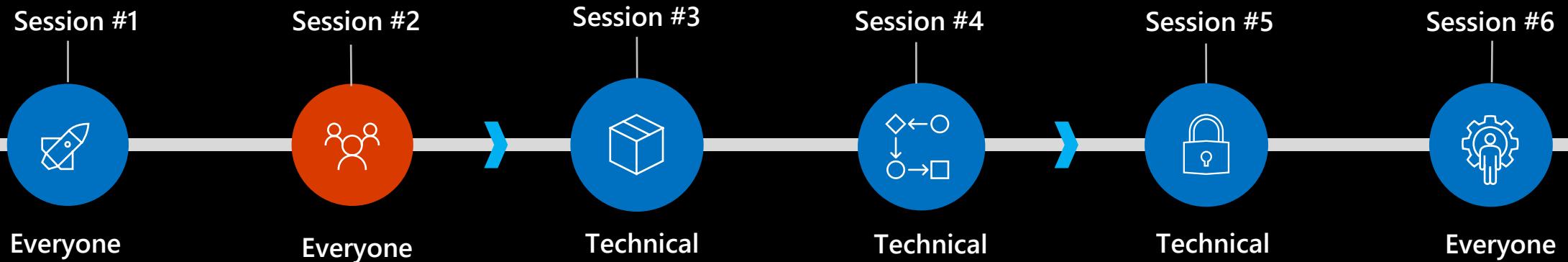
# GitHub-enabled Value Stream Flow



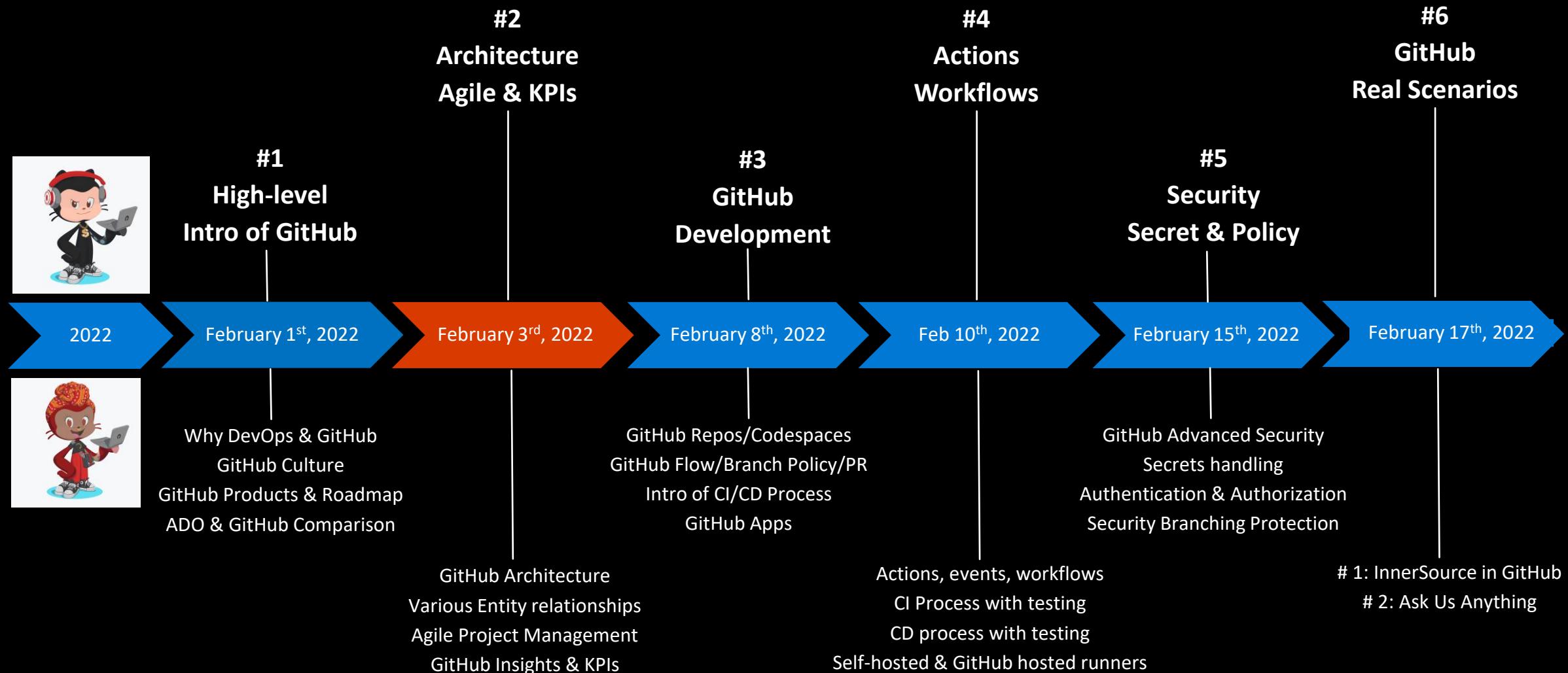


# Questions

# Session #2: Architecture, Agile Project Management, KPIs



# GitHub Bootcamp – February 3<sup>rd</sup>, 2022



# The Topics of the Day – Session #2

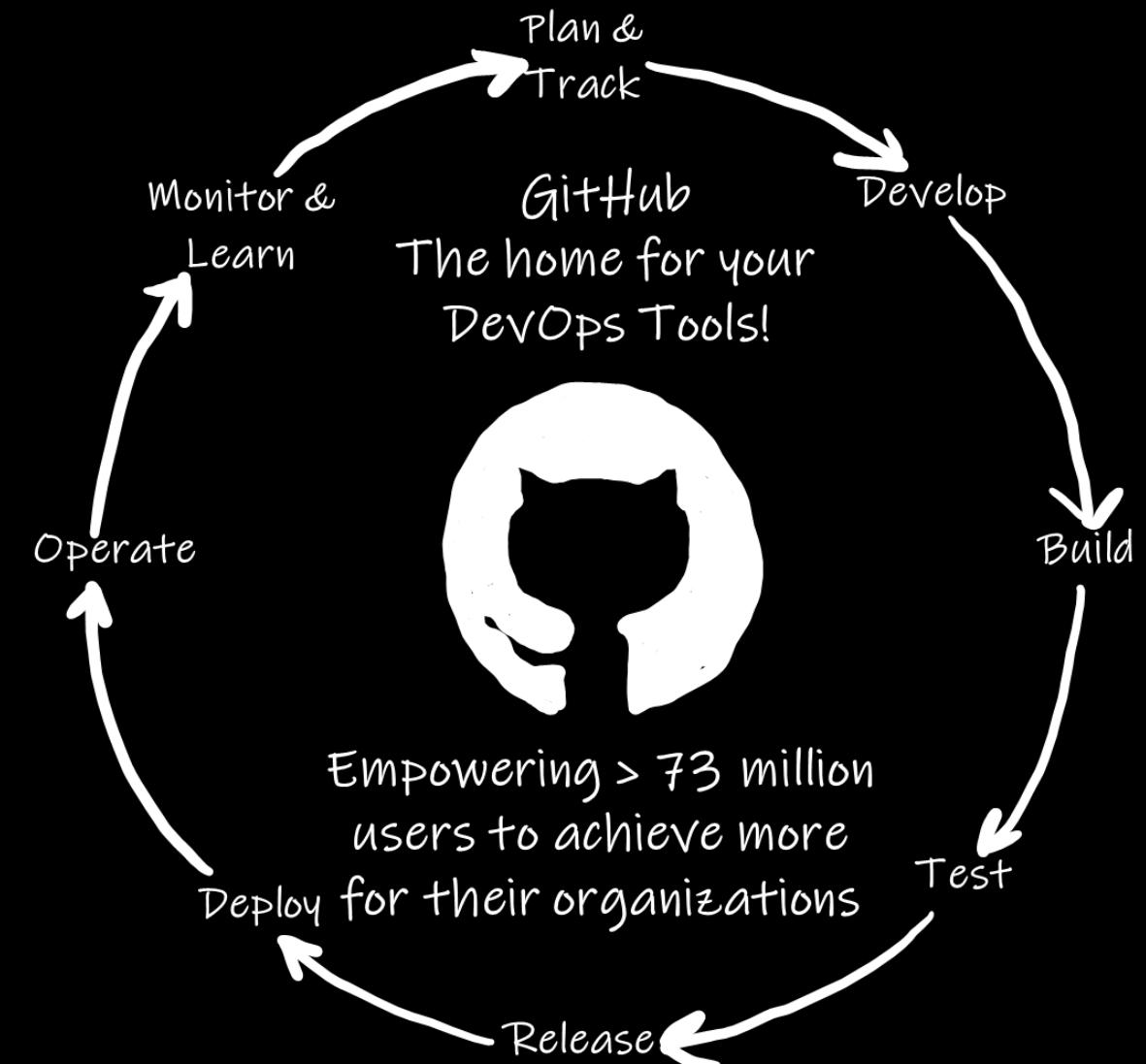
1 GitHub Architecture

2 GitHub Agile Management

3 GitHub Insights

4 DevOps KPIs with Grafana

5 Questions



# CALL TO ACTION

Connect with Microsoft to discuss your needs:

[MSUSDev@microsoft.com](mailto:MSUSDev@microsoft.com)

Learn more about DevOps Dojo:

<https://aka.ms/dojo-intro>

Start a free trial today:

[https://github.com/organizations/enterprise\\_plan](https://github.com/organizations/enterprise_plan)



# Thank You

