
AWS
re:Invent
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PRT063-R

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On the horizon: What's next for security, development, and CloudSec teams?

Ori Bendet

VP of Product Management
Checkmarx

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By 2025, there will be

24M

developers who've learned on the cloud

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95%

of breaches are thought to be due to human error

Source: https://www.cybintsolutions.com/cyber-security-facts-stats/

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1,460

deploys per year

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Less time



Developing faster

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About me – What wakes me up



Michael’s father



Naomi’s husband



Adam’s father

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About me – What keeps me up at night

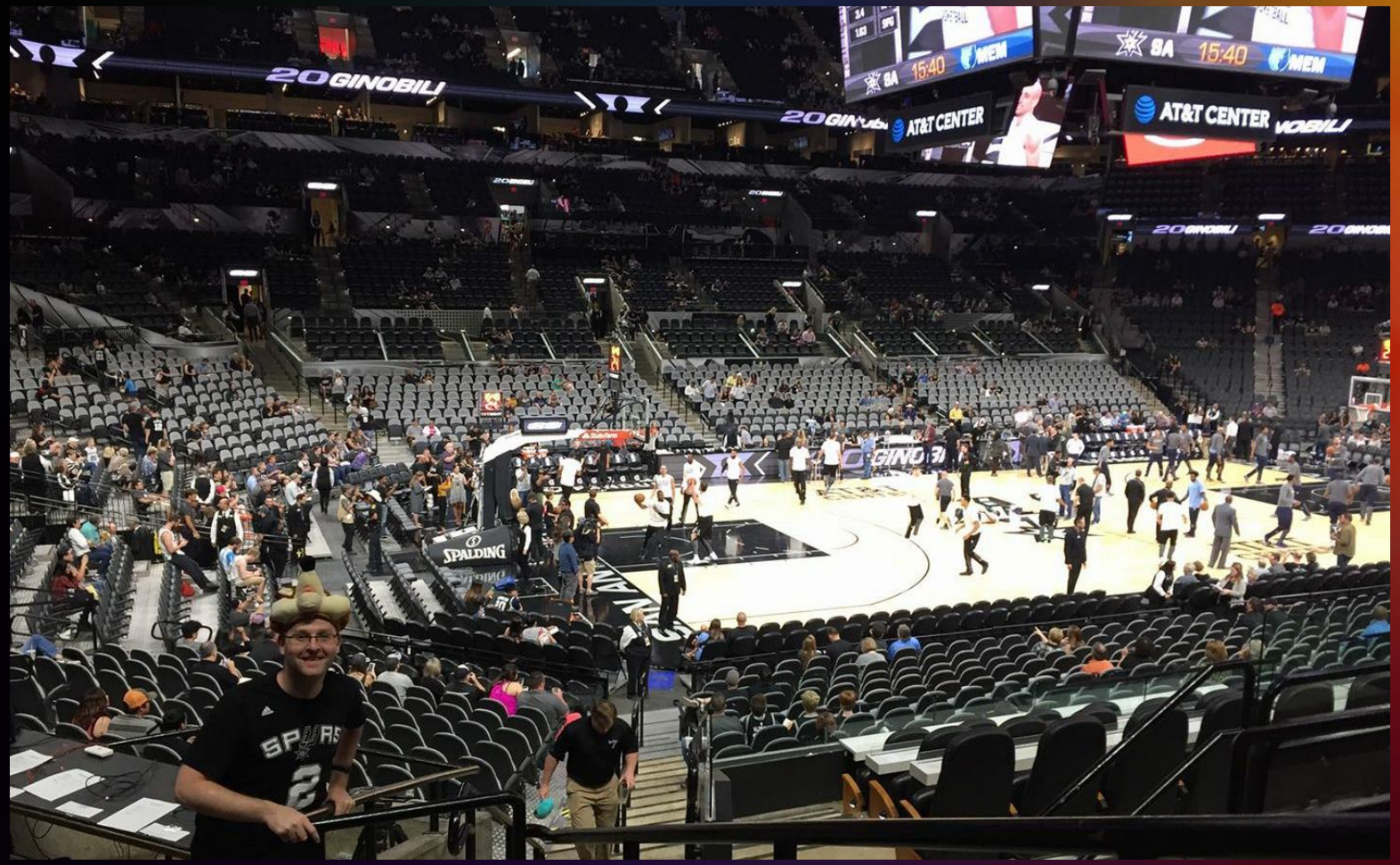






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About me – What keeps me up at night



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Agenda

1. Where we started
2. Where we are right now
3. What lies ahead

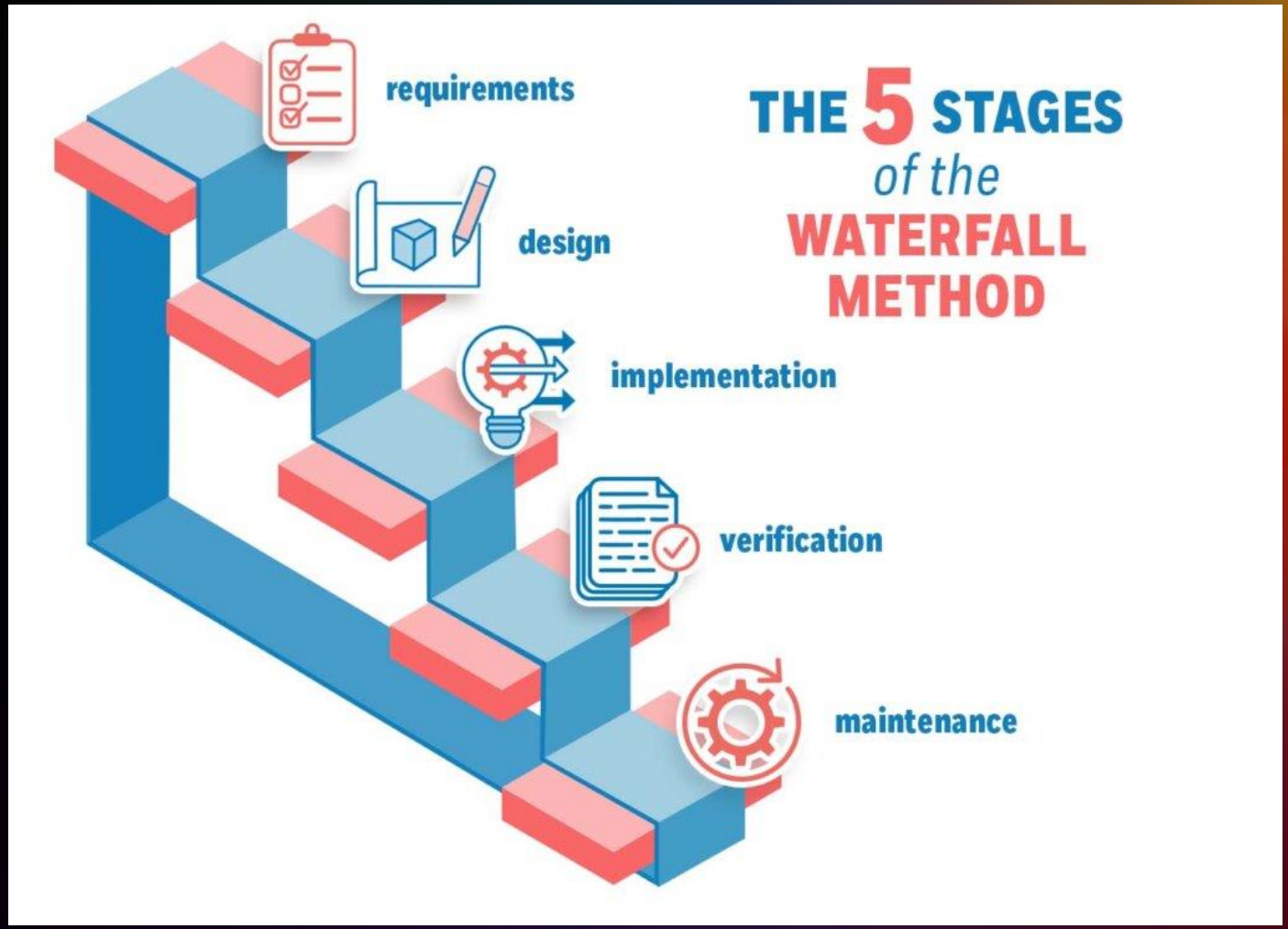
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Where we started

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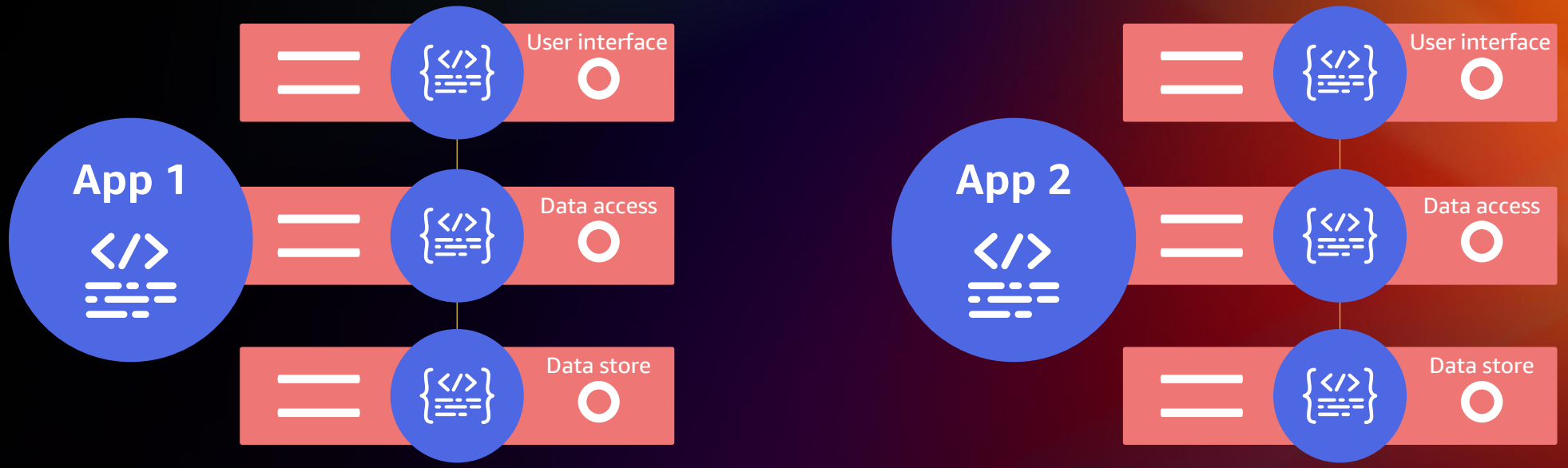


The happy days of sequential development



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One happy monolith(s)

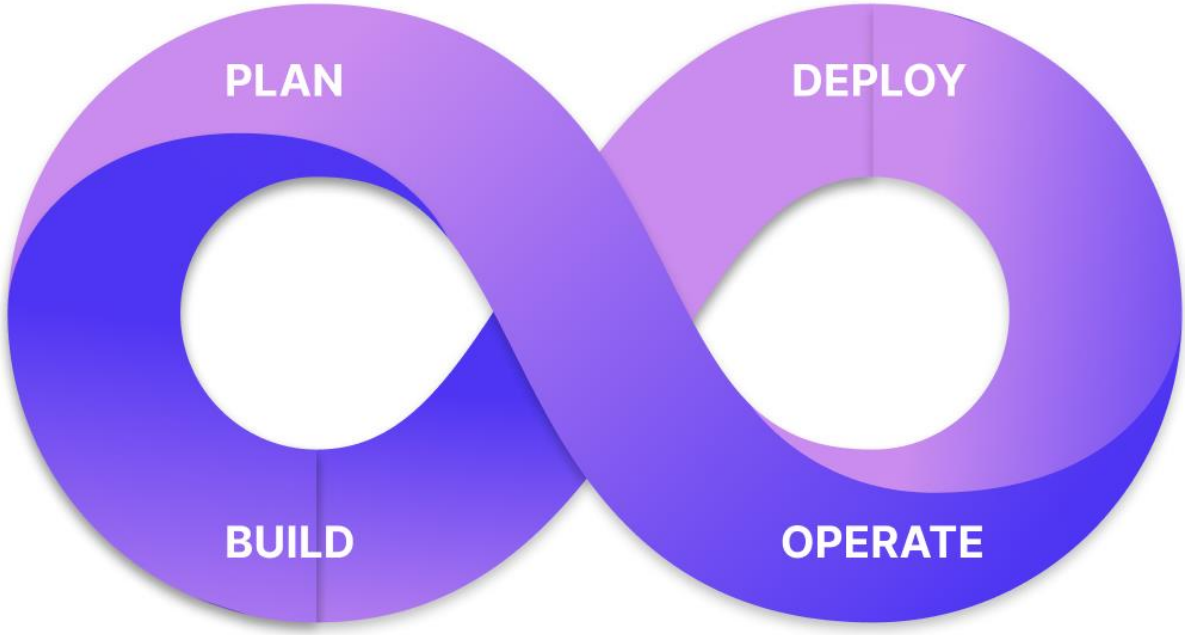


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Then came the cloud

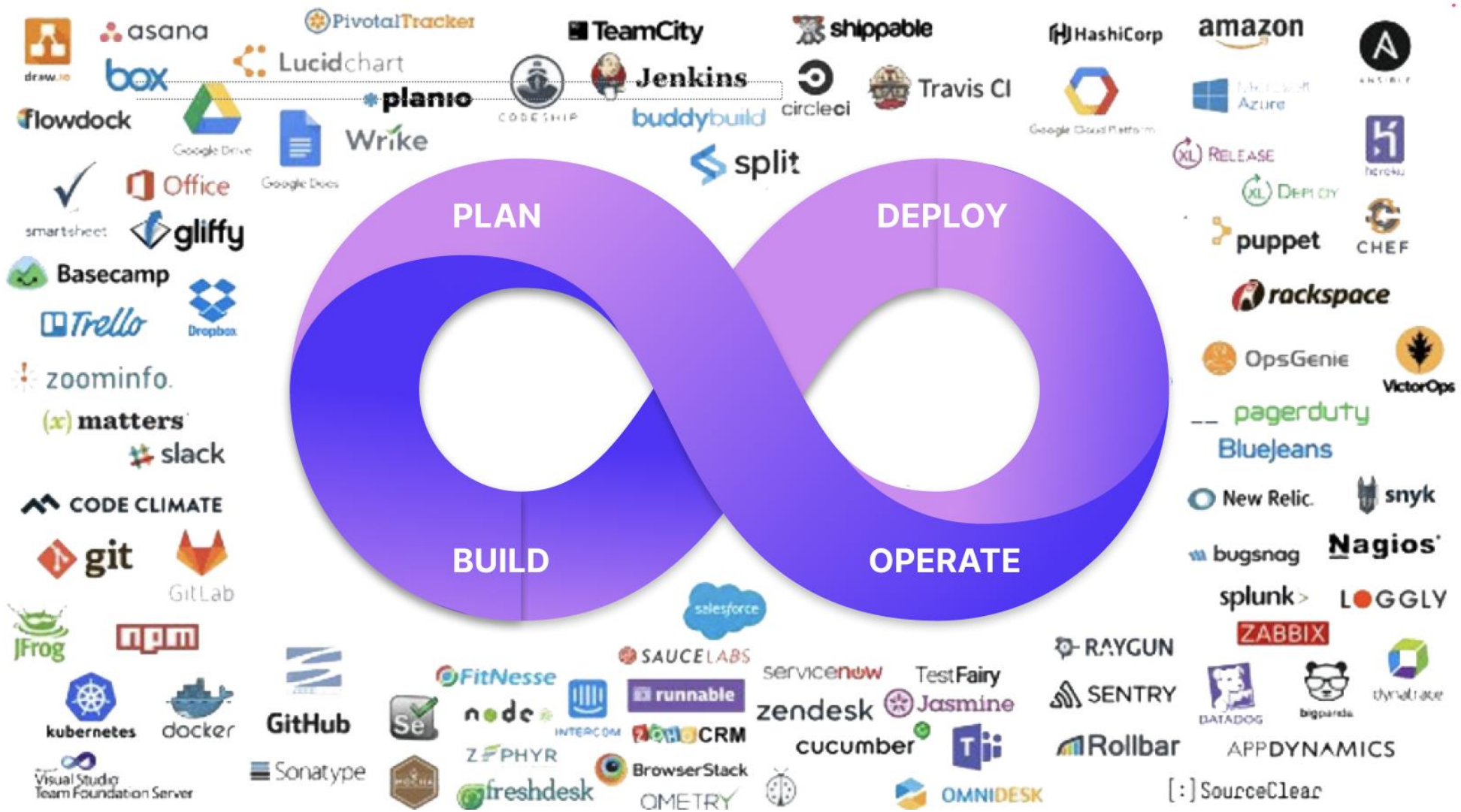
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. . . and continuous everything



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. . . and the ecosystem



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Where we are right now

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Cloud-native is everywhere, with

7.1M

developers trained on cloud

61%
containers

31%
Kubernetes

46%
serverless

*CNCF, “State of Cloud Native”

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Challenges of cloud-native development

- The business need for speed
- Shift left: developer autonomy
- Repository as the center of the universe
- The rise of open source
- Everything as code

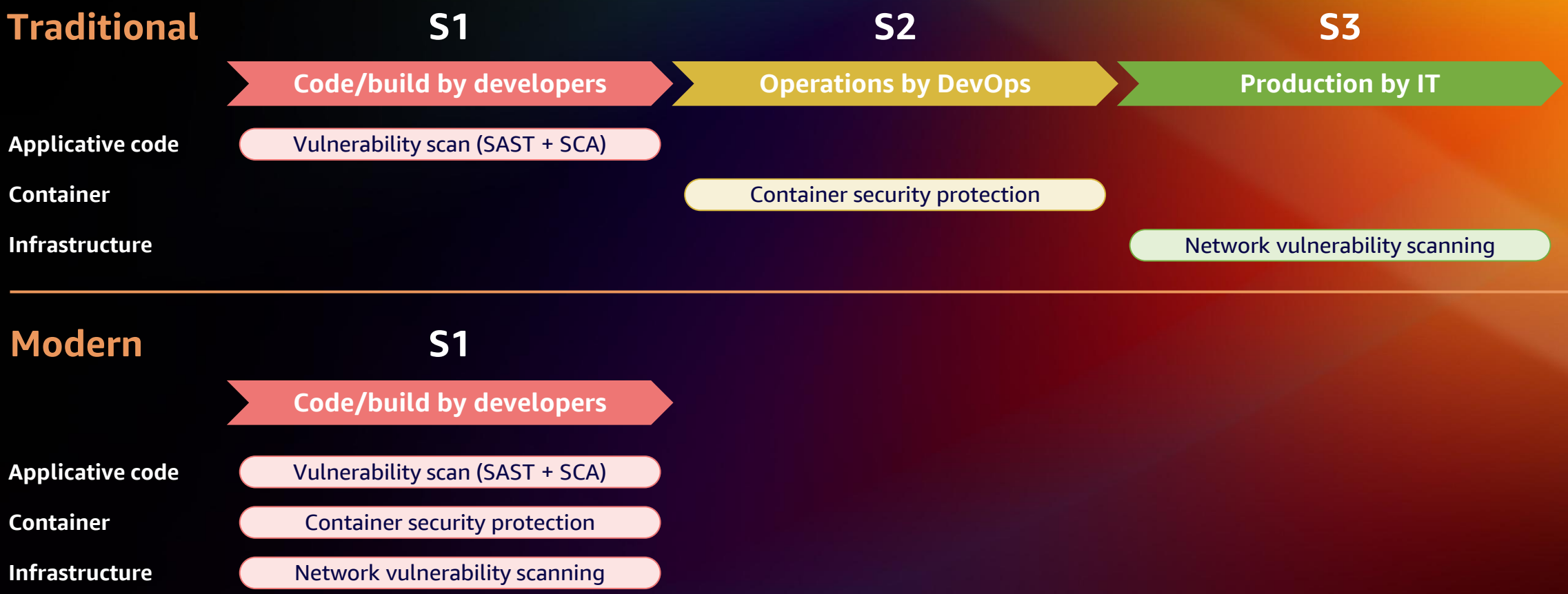
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Go beyond the traditional definition of code . . .

- **APIs** have become a common application building block . . .
- Citizen developers . . . build applications using **low-code platforms** . . .
- Developers are using **infrastructure as code (IaC)** to define cloud configurations . . .
- **Make sure to look for SAST tools that will scan for vulnerabilities in these new types of "code"**

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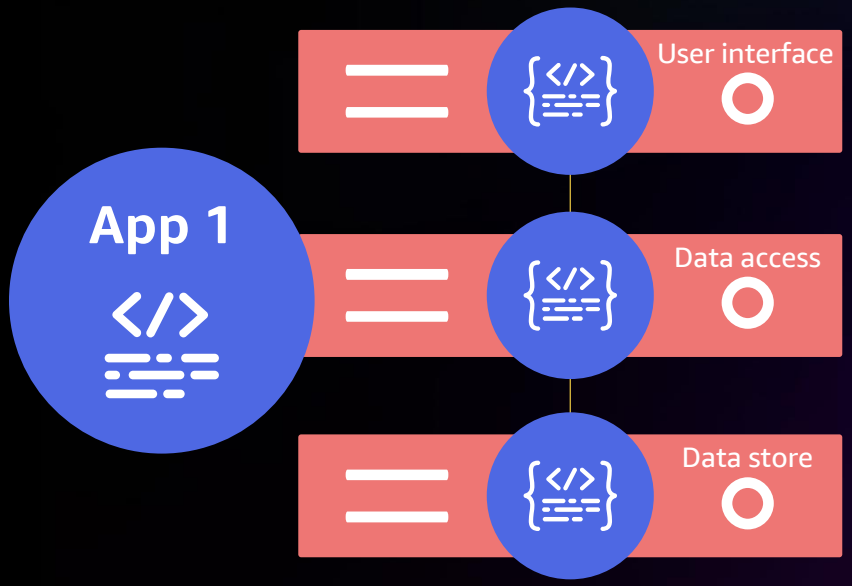
Security shifts all the way left



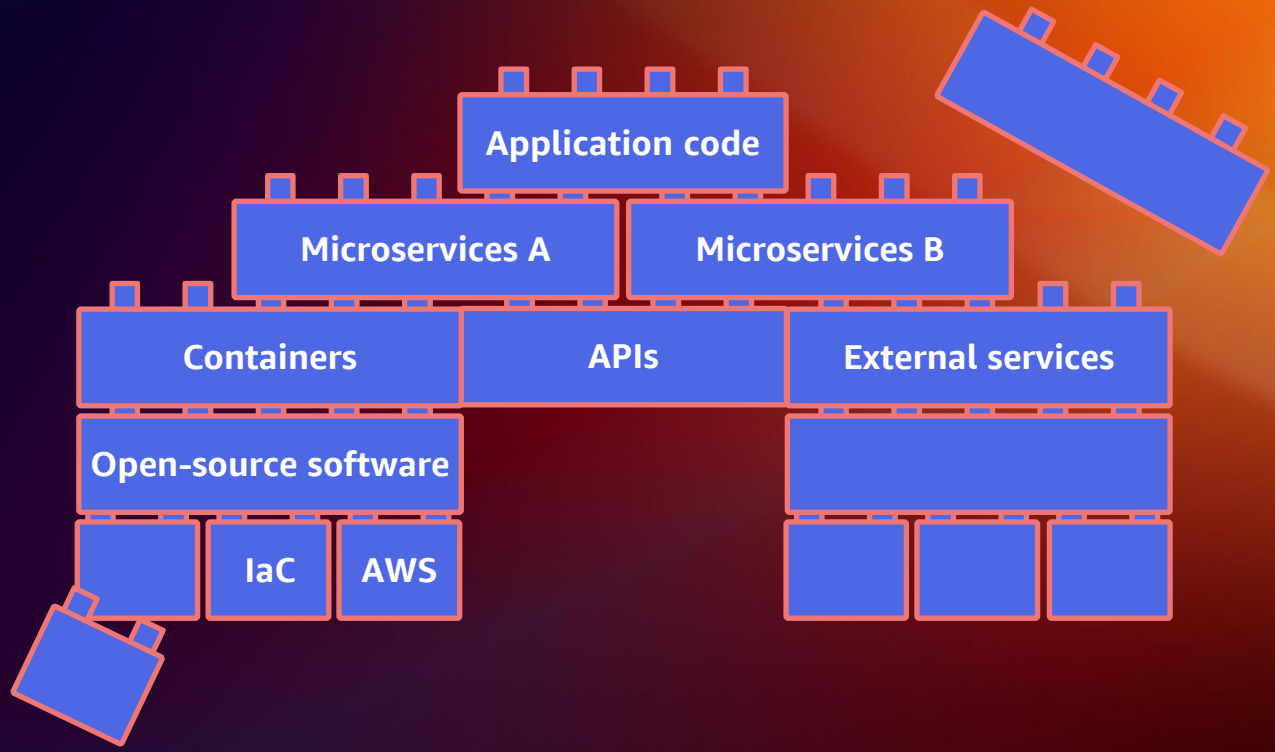
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Evolution of application software architecture

Traditional approach



Modern, cloud-native approach

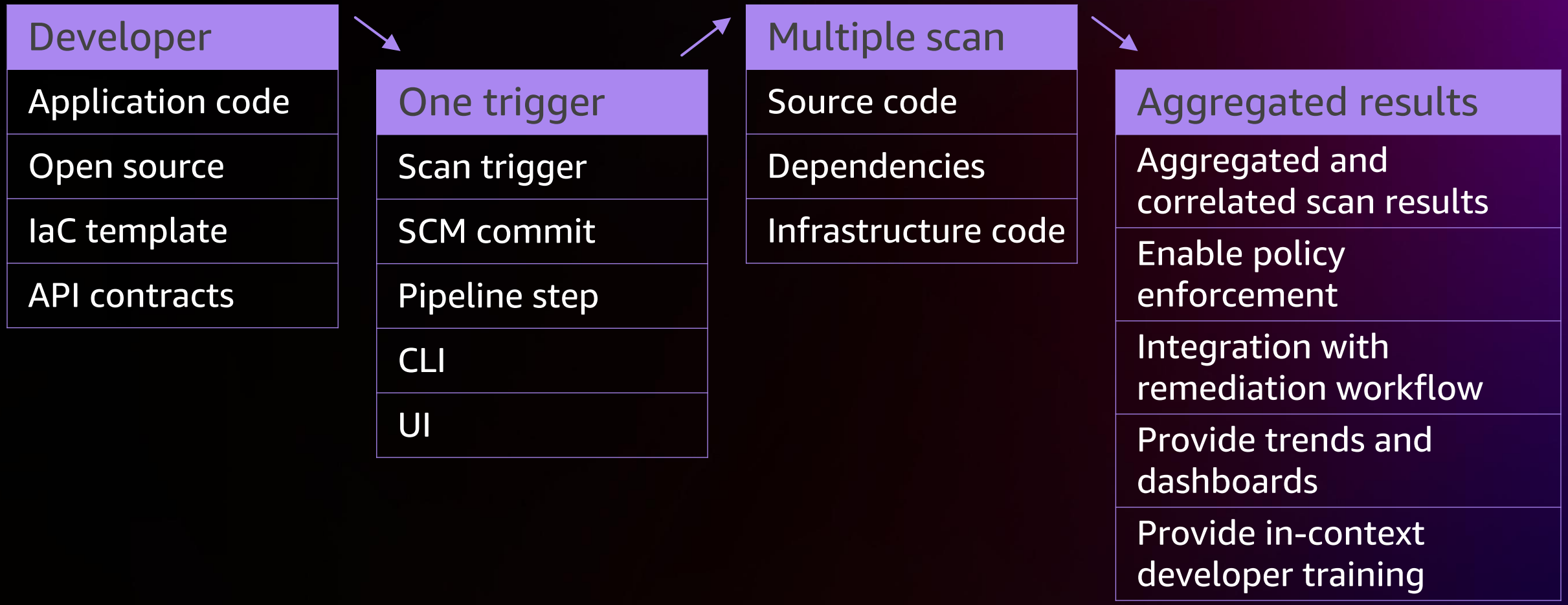


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AppSec versus Dev?

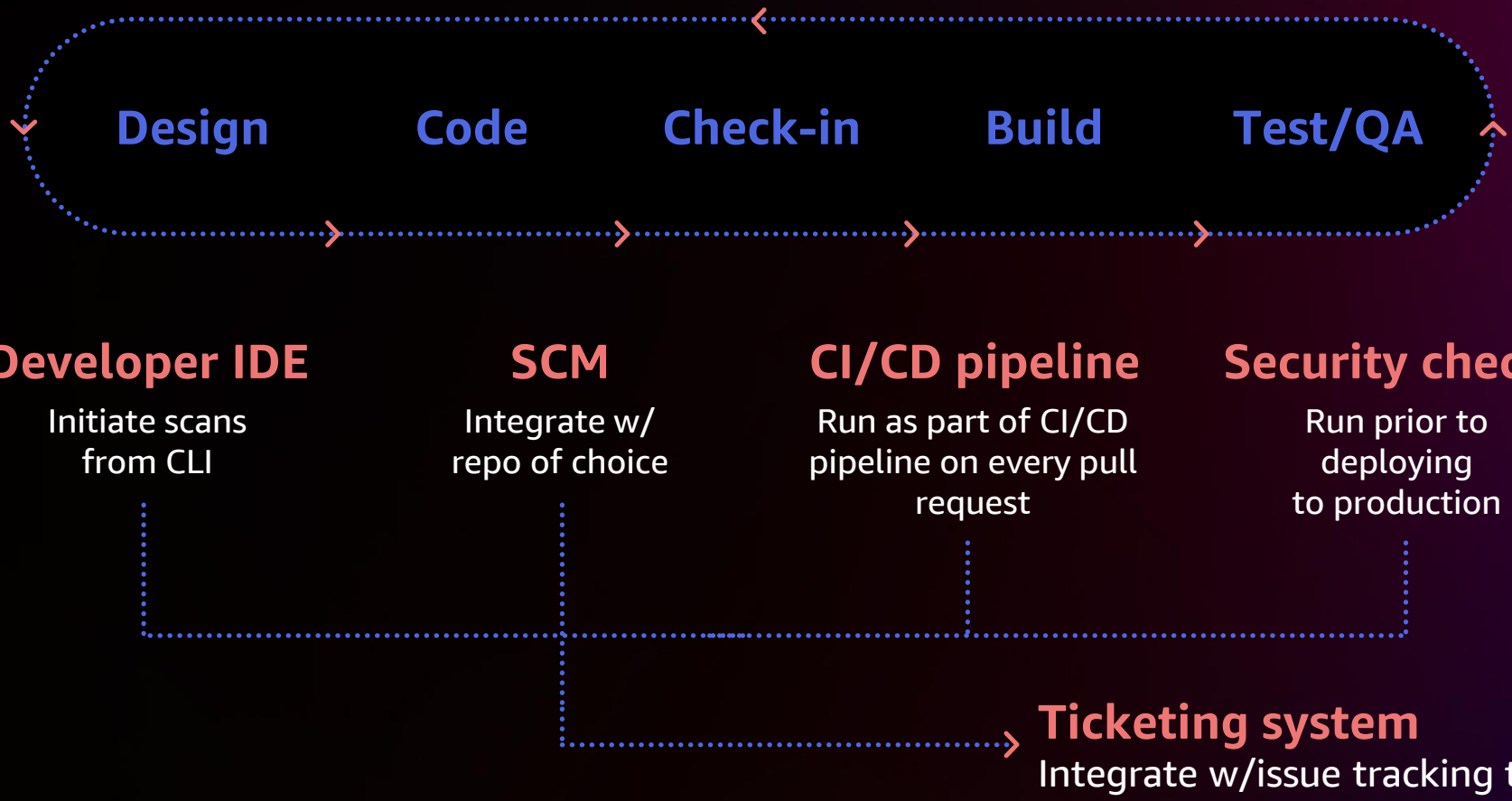
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What do developers want? Keep it simple!



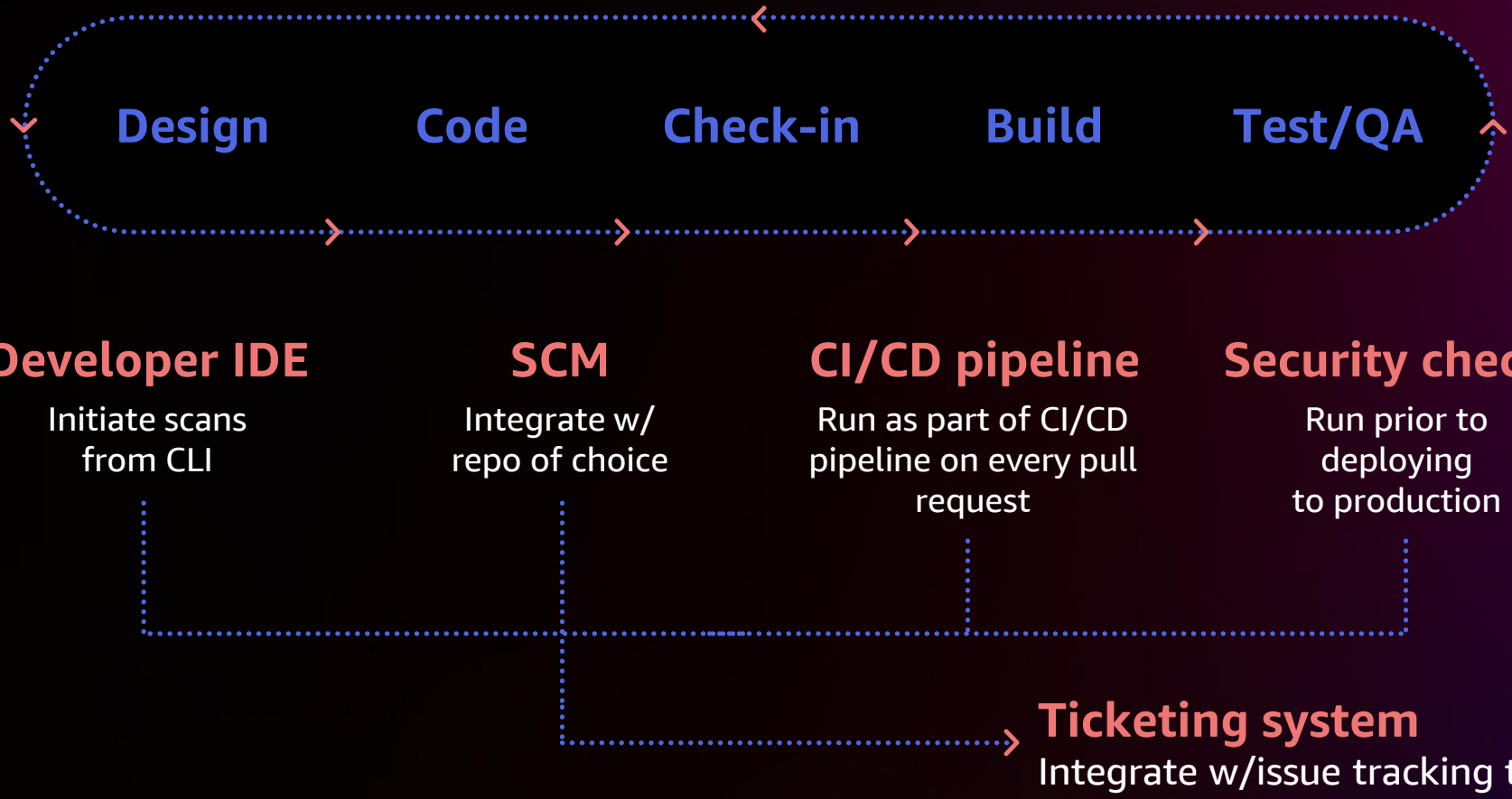
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Flexibility across the development lifecycle



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Don’t touch my CI/CD!



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What do CISOs want? Risk management!

STREAMLINED security scans

- Integrate with developer workflows – speed
- Correlated results to pinpoint risks – remediate
- Unified dashboard and reporting – risk visibility

LOWER total cost of ownership

- Single platform
- No infrastructure ownership or maintenance
- Single support contract
- Straightforward pricing

ENABLE secure digital transformation

- Flexible deployment options from datacenter to the cloud
- AppSec assessment and maturity program

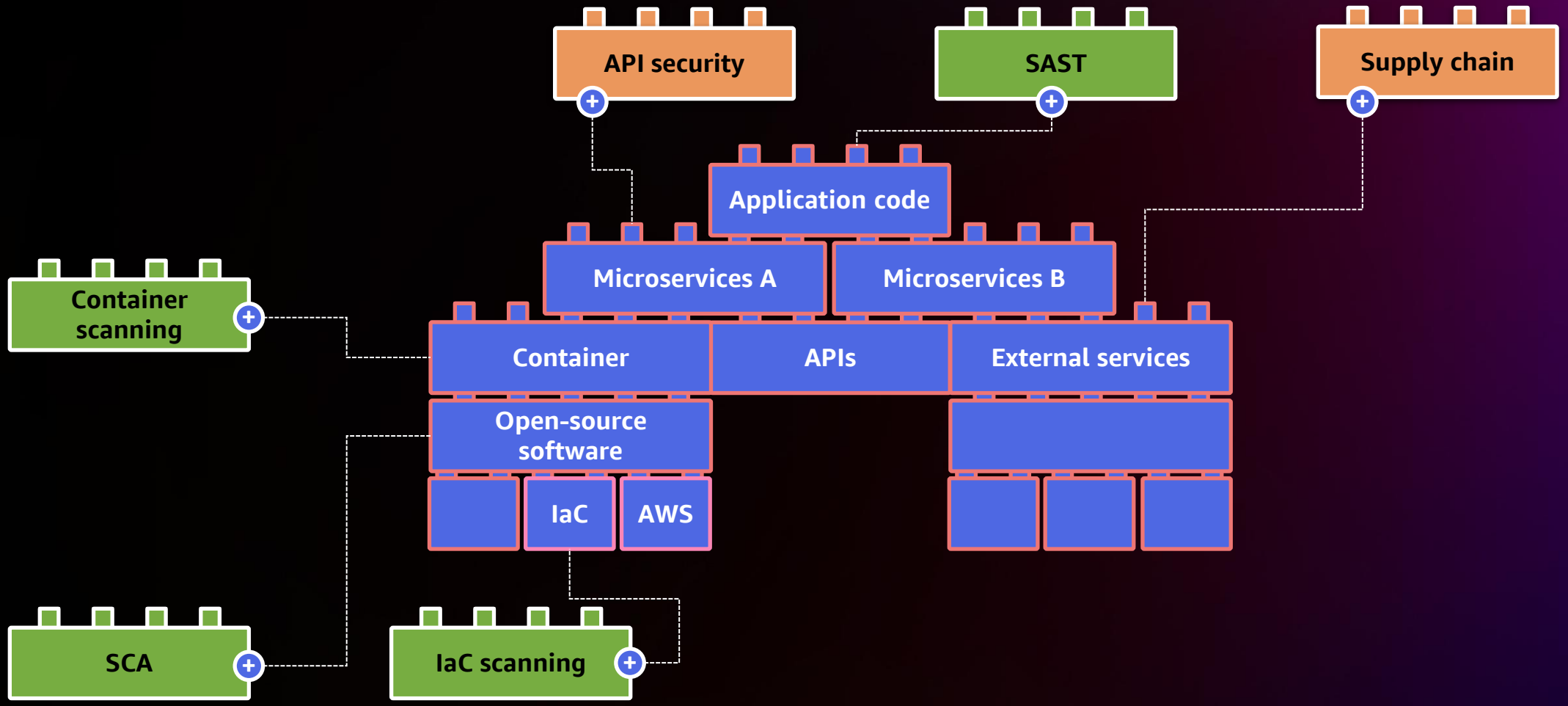
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What lies ahead

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Need full coverage



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Ha! 167 “highs” . . .

KICS REPORT

HIGH	167	MEDIUM	418	LOW	240	INFO	83	TOTAL	908

PLATFORMS Dockerfile, Common
START TIME 14:40:11, Jun 29 2021
END TIME 14:40:11, Jun 29 2021
SCANNED PATHS:
- assets/queries/dockerfile

COPY '--from' References Current FROM Alias

Results 1

Severity HIGH
Platform Dockerfile
Category Build Process

assets/queries/dockerfile/copy_from_references_current_from_alias/test/positive.dockerfile:2

Copy With More Than Two Arguments Not Ending With Slash

Results 1

Severity HIGH
Platform Dockerfile
Category Build Process

assets/queries/dockerfile/copy_with_more_than_two_arguments_not_ending_with_slash/test/positive.dockerfile:2

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You have all been there . . .



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You have all been there . . .



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Ain’t nobody got time for AppSec

Scanners lack content

Vulnerabilities “fatigue”

Limited resources; limited time

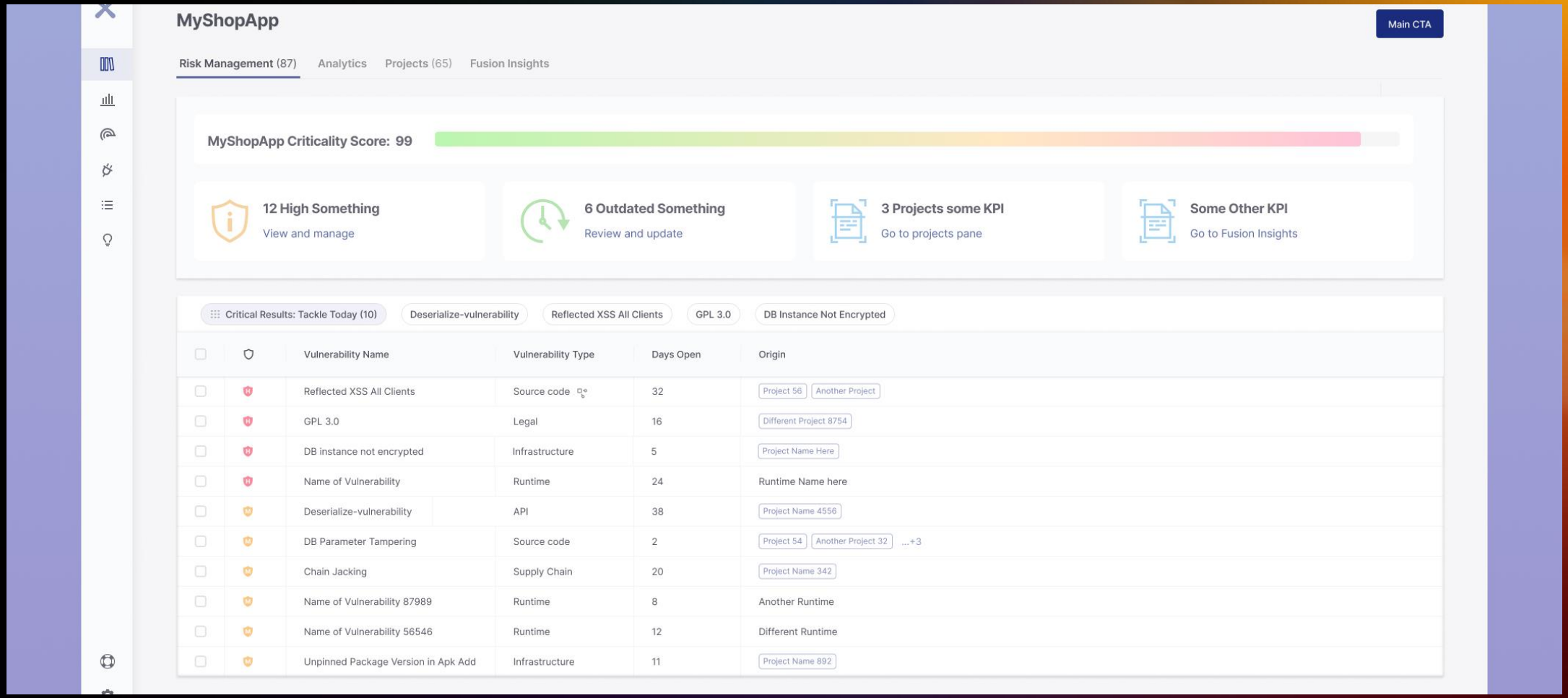
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Ain’t nobody got time for AppSec

If you had 5 minutes to remediate, where would you focus?

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Risk management > Single vulnerability



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The “average day” developer

doesn’t really care . . .



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So who does care?



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The rise of "security champions"

- They care
- They bridge the gap between AppSec and developers
- They're a "go-to team" for all things AppSec



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Back to the “average day” developer



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It’s all about developer experience

Now they care



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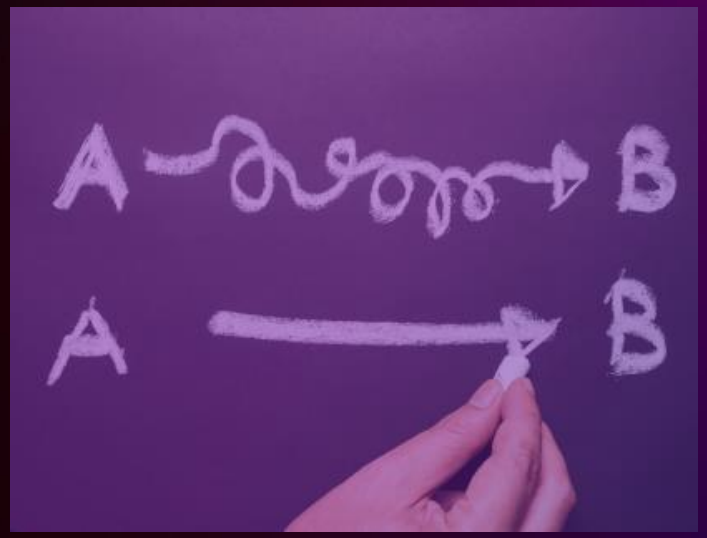
Developer experience



Efficiency
Making me more efficient as a developer



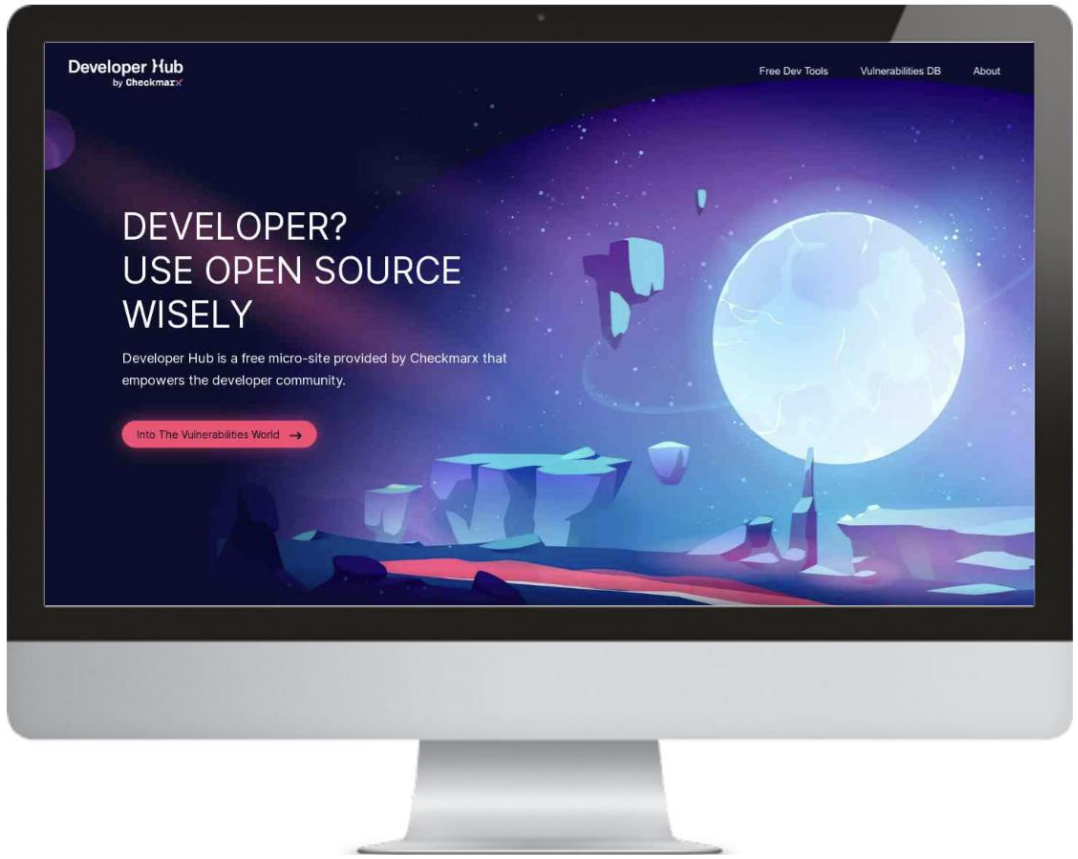
Immediate value
It should help me now, not later



Ease of use
Keep it simple!

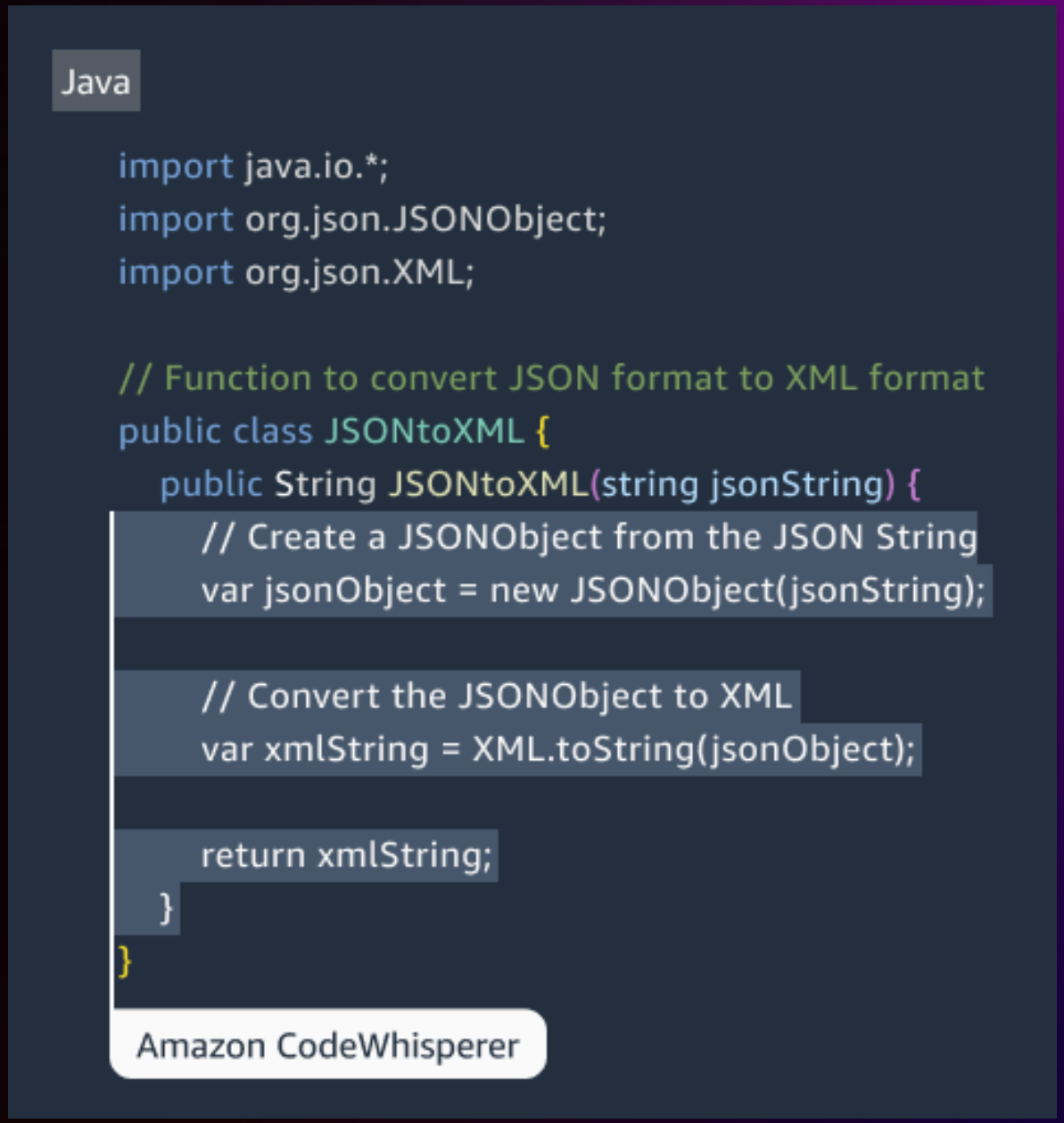
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Checkmarx's Developer Hub



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Amazon CodeWhisperer



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To quote Beyoncé, to the left . . . to the left . . .



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But what about right?

- Production holds the missing context to better help prioritization
- When was the last time you are your APM?
- It’s no longer about left or right; simply the real circle of DevSecOps

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Recap time!

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Recap

1. Where we started
2. Where we are right now
3. What lies ahead

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Last thing!

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Low/no code, anyone?



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Thank you!

Ori Bendet
Twitter @bendet_ori



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