

AWS
re:Invent

CON321

DevSecOps with Docker and AWS Fargate

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AWS

Related Breakouts

Wednesday, Nov 28**

CON322-R: Mythical Mysfits: Management and Ops with AWS Fargate
11:30am – 1:45pm | Mirage, Mirage Event Center C1

Friday, Nov 30

CON322-R: Mythical Mysfits: Management and Ops with AWS Fargate
11:30am – 1:45pm | Mirage, Mirage Event Center C1

*** Repeat session if full – CON322-R1
See session catalog for times and locations.*

Agenda

Release Processes

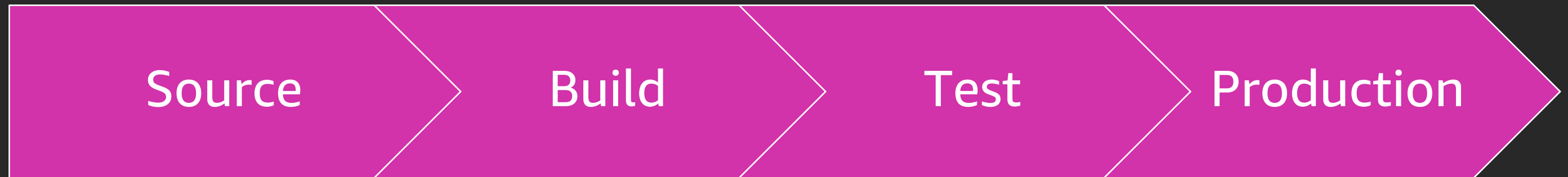
CI/CD on AWS

- AWS CodeCommit
- AWS CodePipeline
- AWS CodeBuild

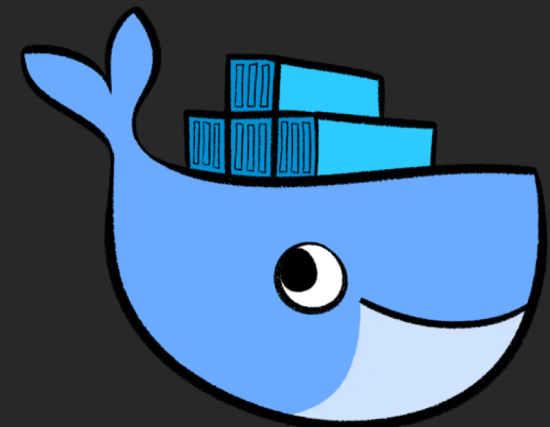
Hands On Lab

Release Processes

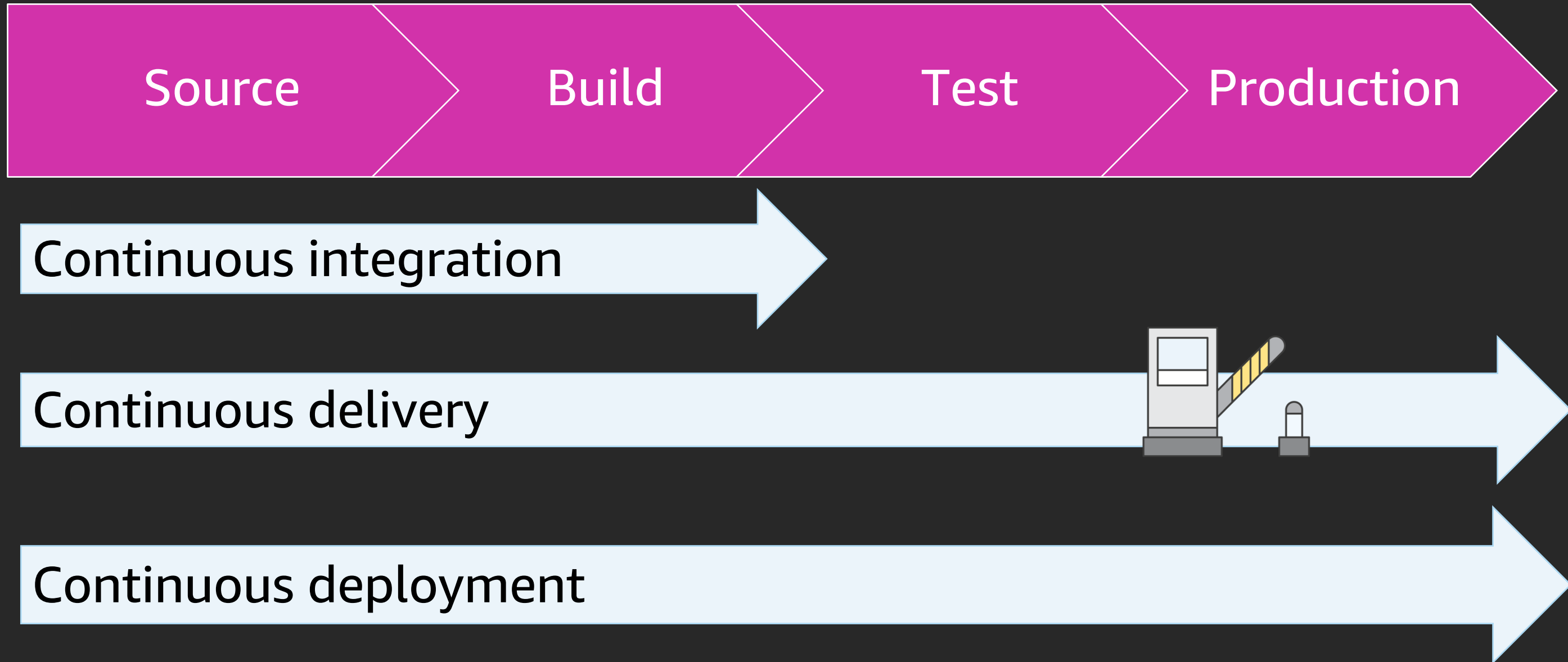
Release Process Phases



- Check-in source code such as Dockerfiles
- Peer review new code
- Compile code
- Unit tests
- Style checkers
- Code metrics
- Create container images
- Integration tests with other systems
- Load testing
- UI tests
- Penetration testing
- Deployment to production environments

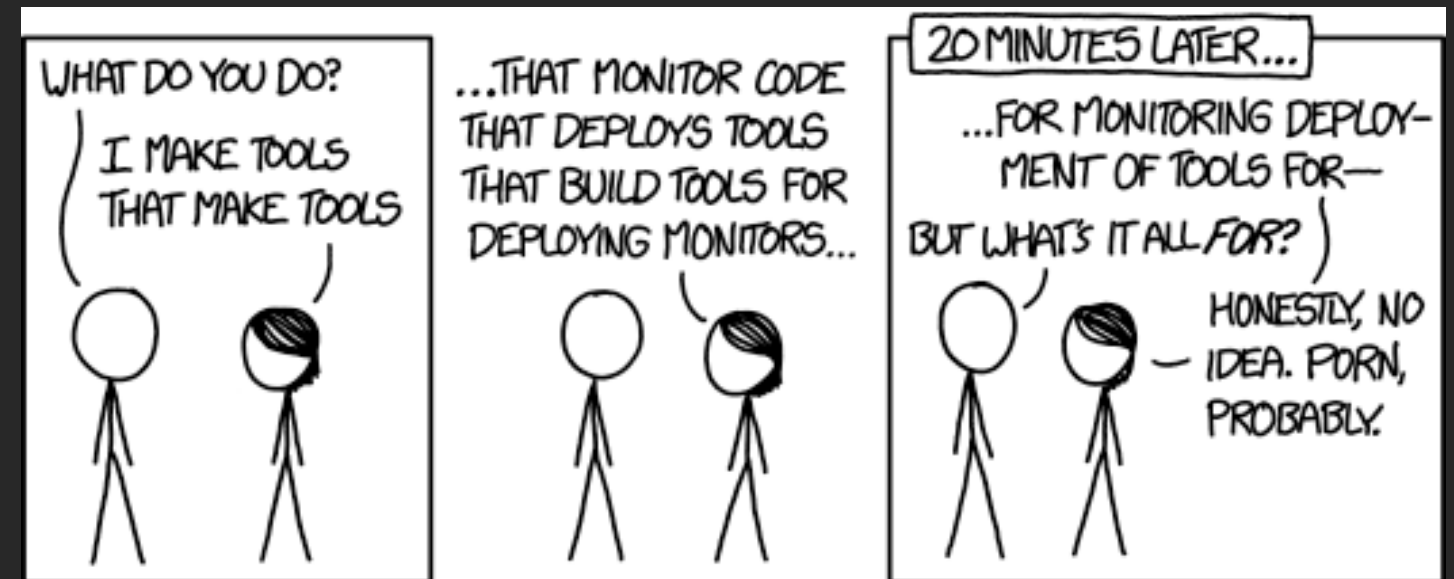


Release Process Phases



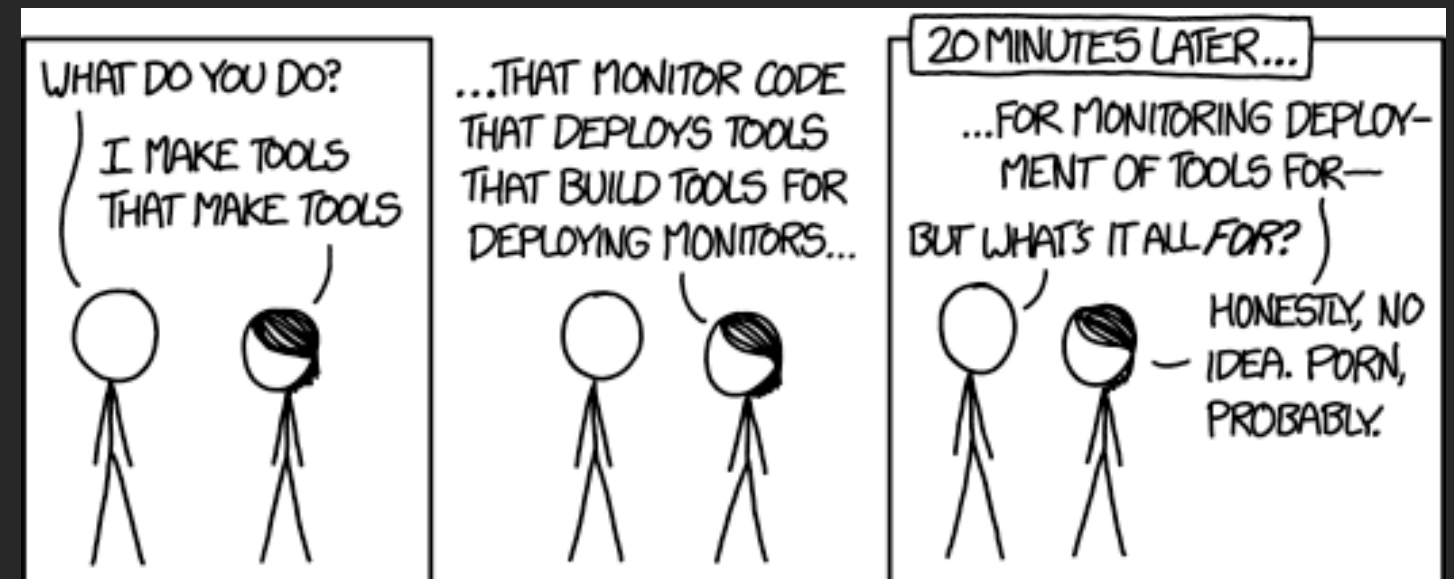
Why should I care about CI/CD?

- Velocity
- Improved Productivity and Efficiency
- Reduced Risk
- Shorter Feedback Loop
- Automation!



Challenges

- Automation!
- Metrics and Monitoring
- Legacy processes
- Legacy...anything



Common patterns and solutions

Automate as much as possible

- Start small. Don't try to automate everything

Microservices

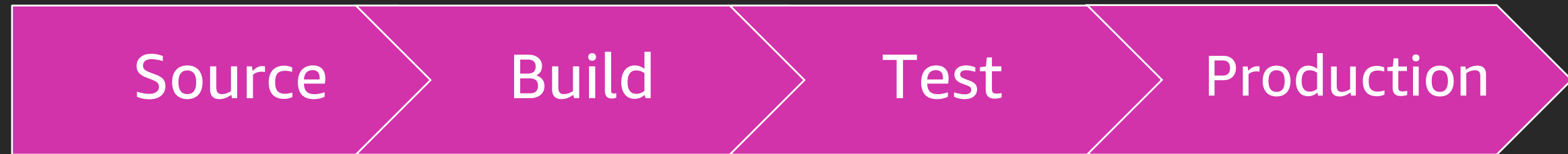
Strict API Contracts

- Get expected outputs from teams consuming your service

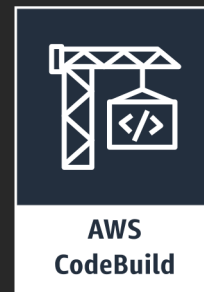
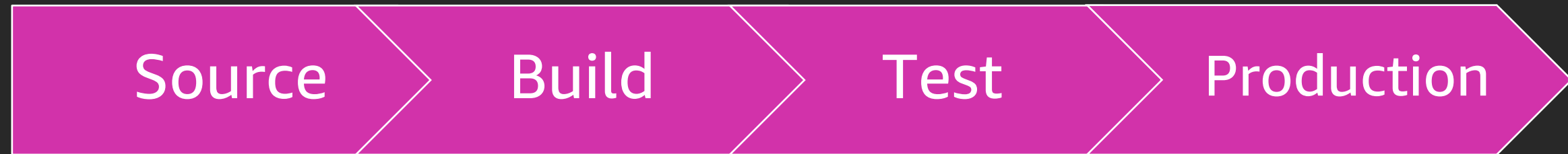
Testing

- Mandate arbitrary number of tests to start

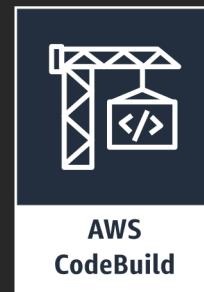
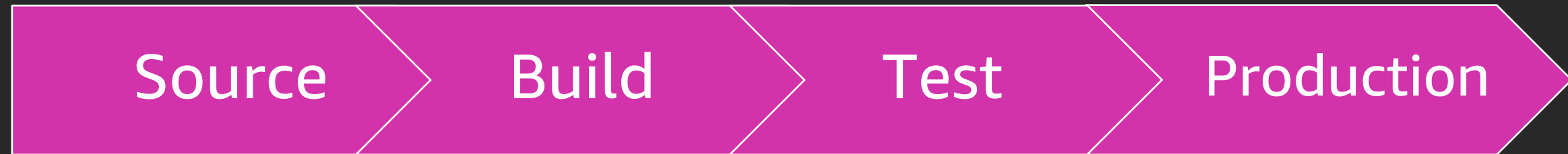
AUTOMATE AUTOMATE AUTOMATE!



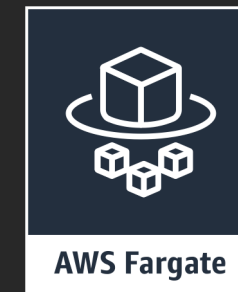
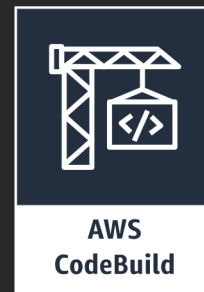
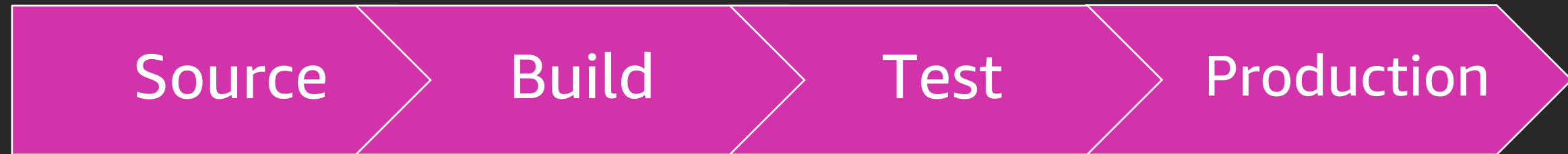
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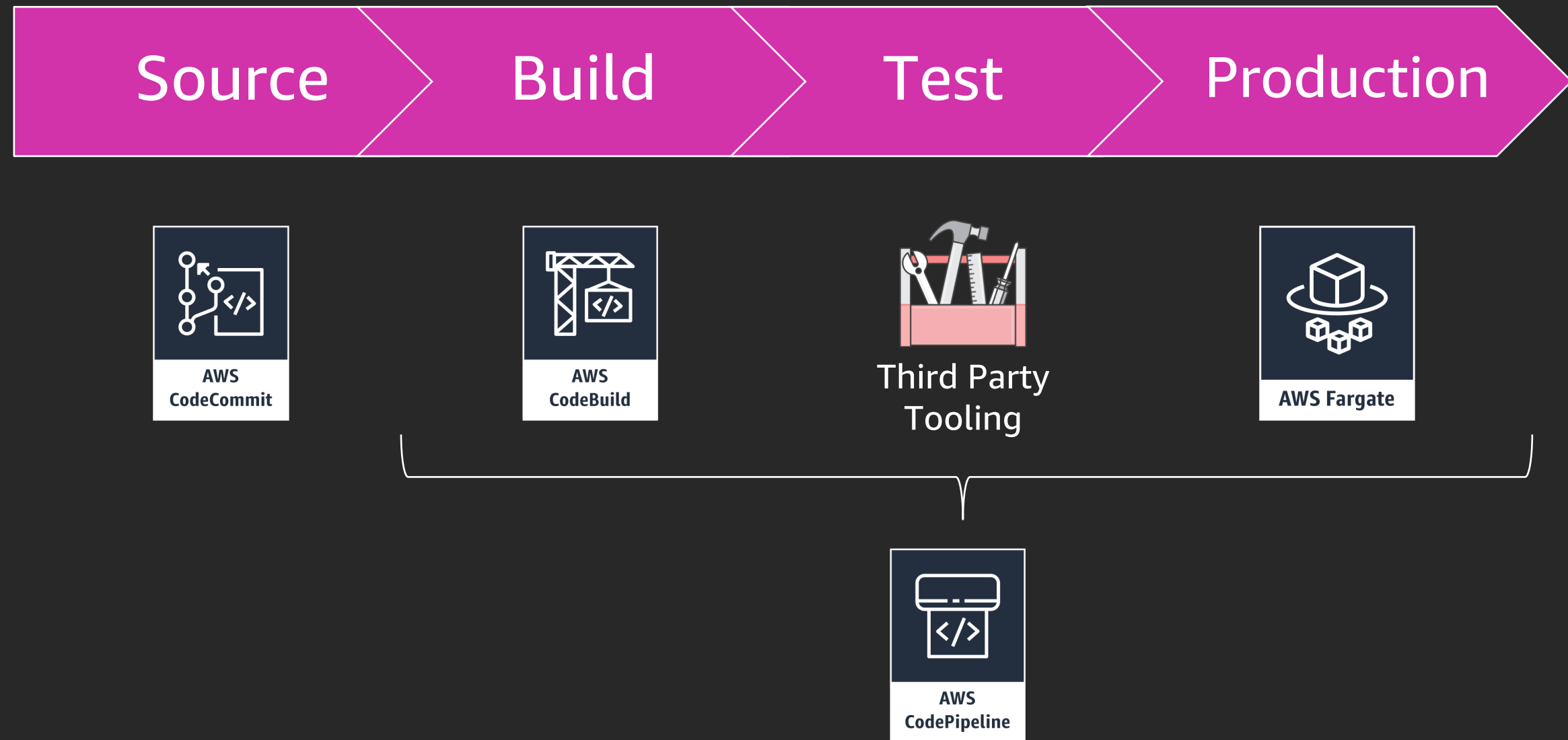
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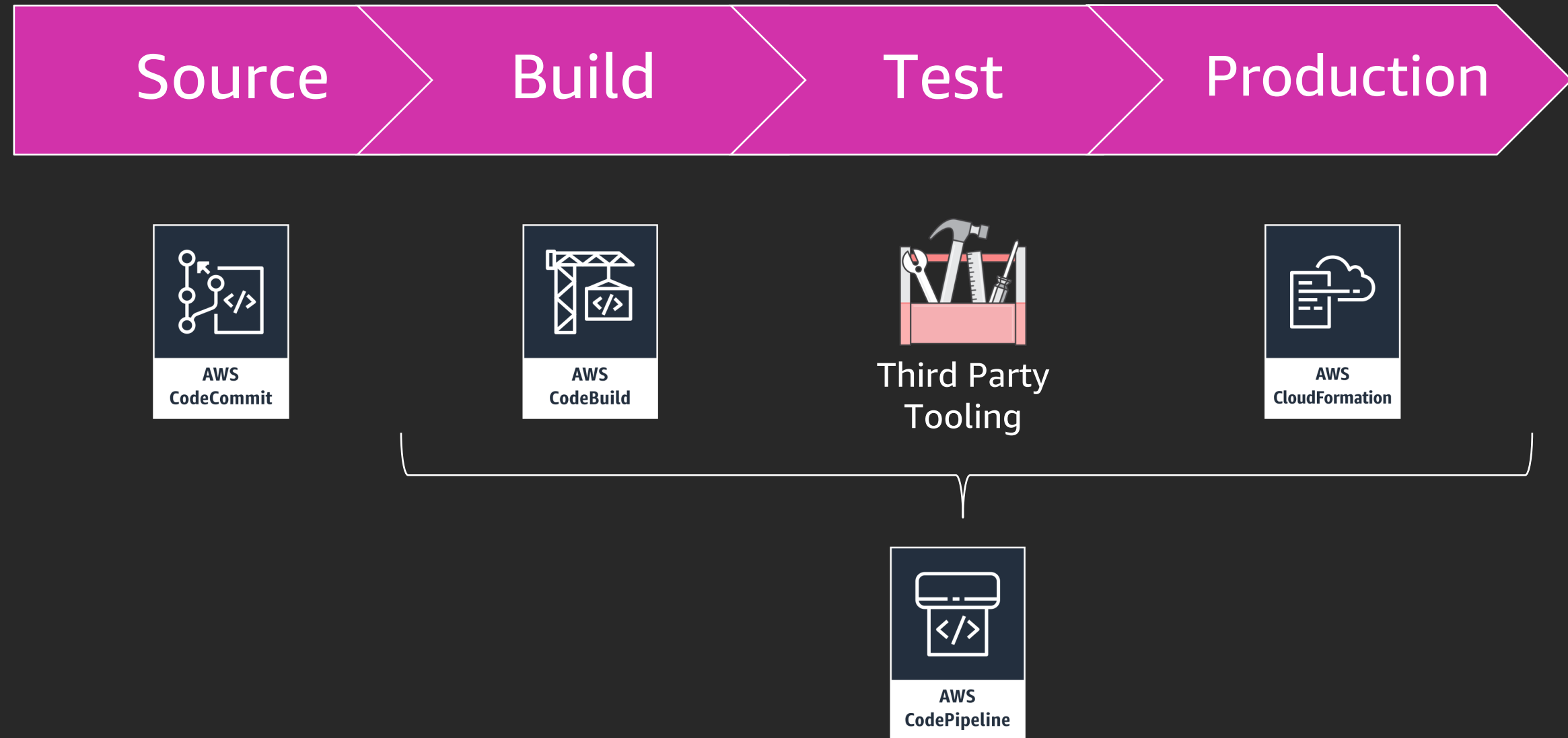
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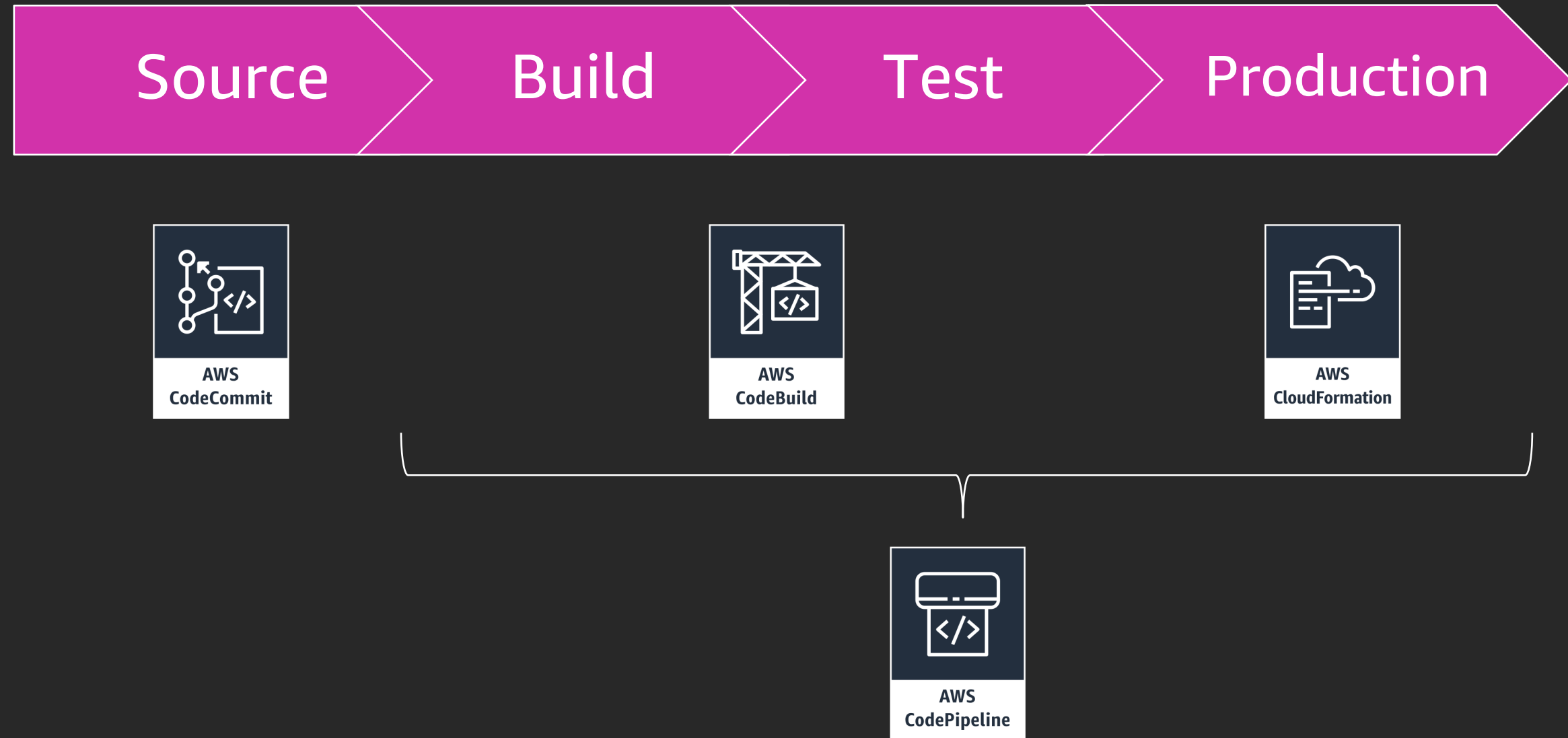
AUTOMATE AUTOMATE AUTOMATE!



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Hands On Lab

Mythical Mysfits



www.mythicalmysfits.com

Welcome to Mythical Mysfits



Our mission: Ethical, mythical creature care.

Our priority: Find homes for the abandoned, and often misunderstood, mythical creatures in our community.



Help us find their forever homes!



Your mission: Modernize and innovate on the Mythical stack.

Lab 0: Mythical stack - recap

Lab 1: Starting the DevSecOps journey

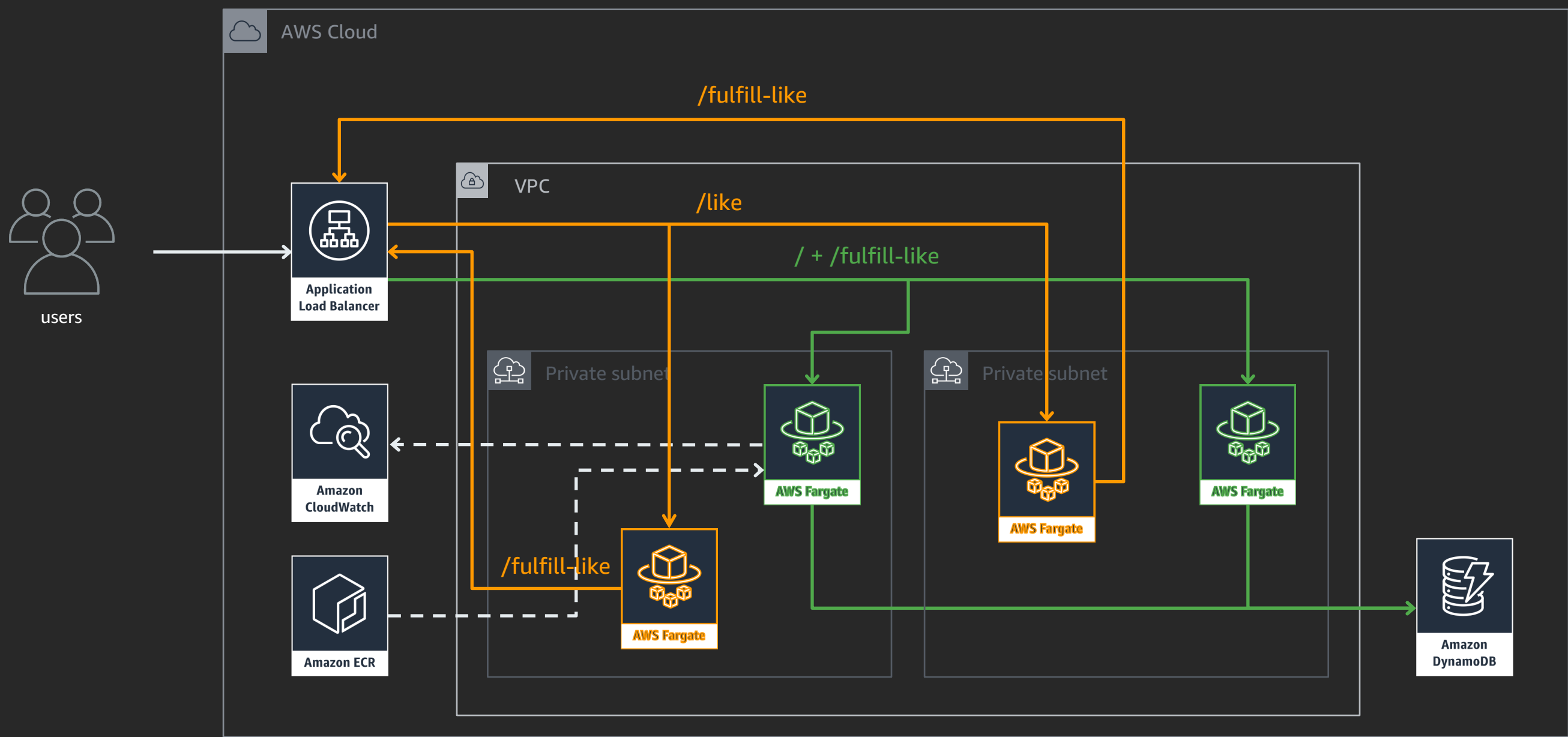
Lab 2: Offloading builds from local machines

Lab 3: Automating end to end deployments

Lab 4: Implementing container image scanning



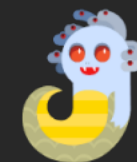
Lab 0: Mythical stack - recap



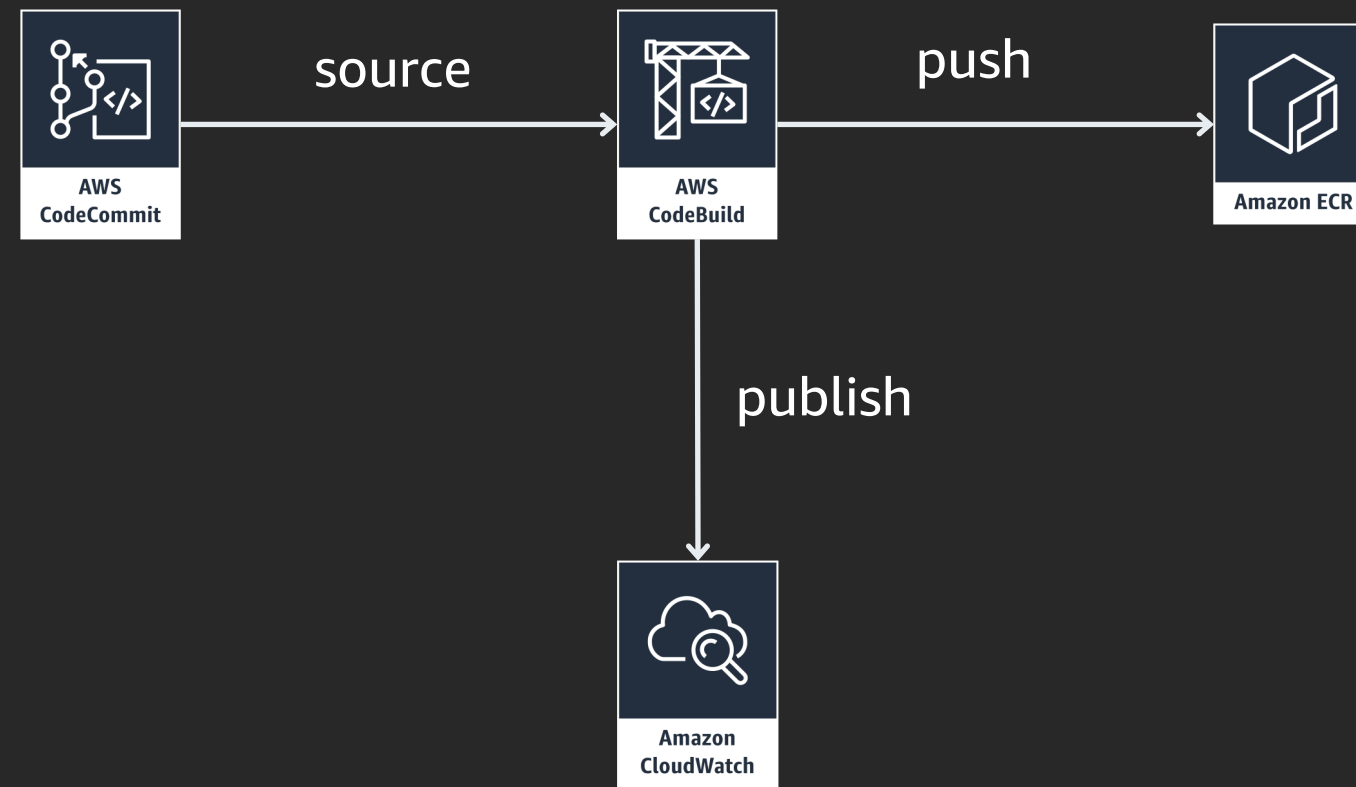
Lab 1: Starting the DevSecOps journey



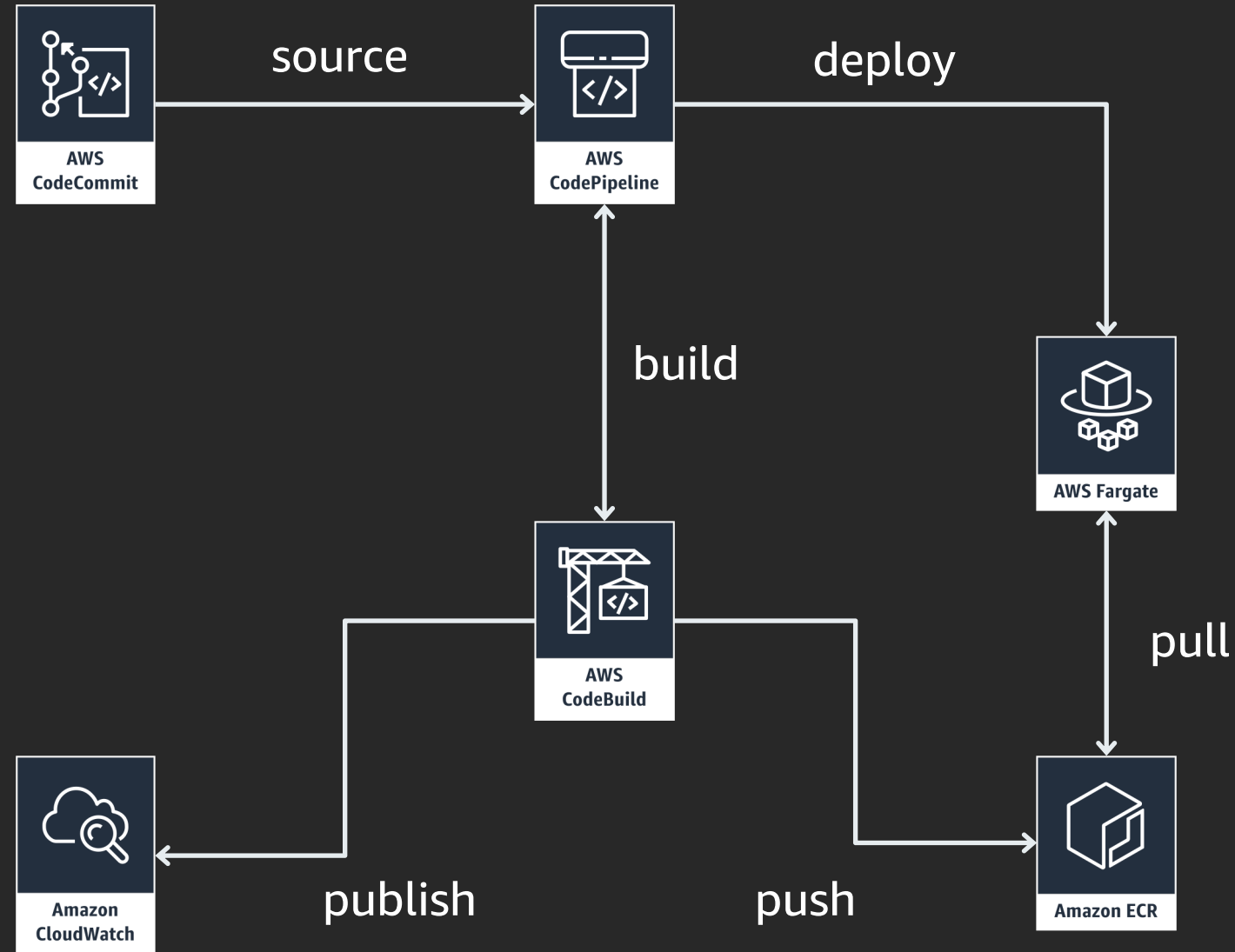
You



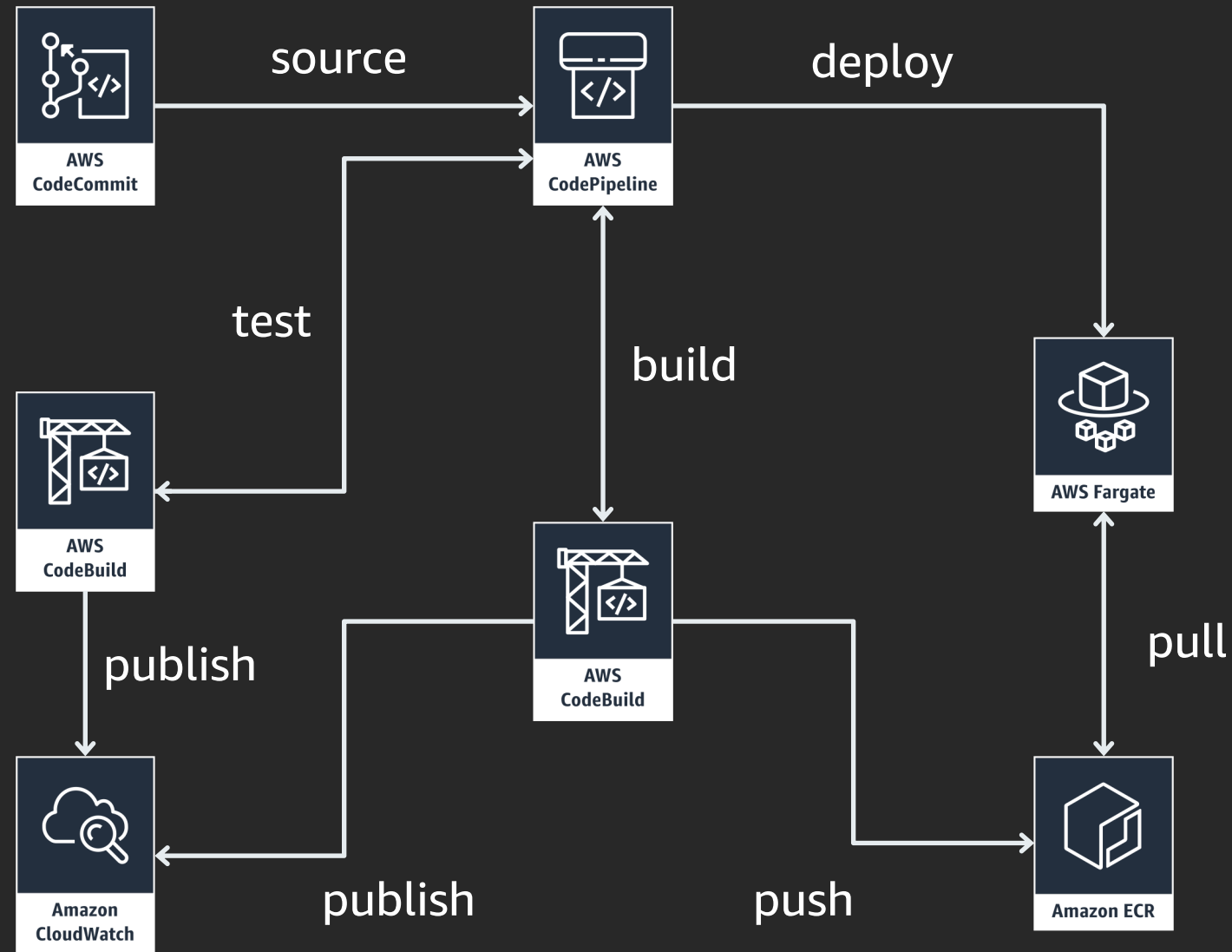
Lab 2: Offloading builds from local machines



Lab 3: Automating end to end deployments



Lab 4: Implementing container image scanning



Logistics



Instructions:

<http://www.mythicalmysfits.com/fargate-devsecops>

Raise your hand if you have any questions. Feel free to work together with folks at your table. Near the end, we'll hand out \$25 AWS credit codes to cover costs for the workshop.

High-five your neighbors and have fun! Please fill out feedback forms and follow the clean-up instructions once you are done!

Email us with comments/questions/feedback:

aws-fargate-mysfits@amazon.com



Thank you!

Hubert Cheung
aws-mythical-mysfits@amazon.com



Please complete the session
survey in the mobile app.