



AWS re:Invent

CON207-R2

Mythical Mysfits: Build a modern web application on AWS

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Agenda

Modern applications

Mythical Mysfits

Hands-on lab

Approaches to modern application development

- Accelerate the delivery of new, high-quality services
 - Simplify environment management
 - Reduce the impact of code changes
 - Automate operations
 - Gain insight across resources and applications
 - Protect customers and the business
-

Approaches to modern application development

- Accelerate the delivery of new, high-quality services with **CI/CD**
 - Simplify environment management with **serverless technologies**
 - Reduce the impact of code changes with **microservice architectures**
 - Automate operations by **modeling applications & infrastructure as code**
 - Gain insight across resources and applications by enabling **observability**
 - Protect customers and the business with **end-to-end security & compliance**
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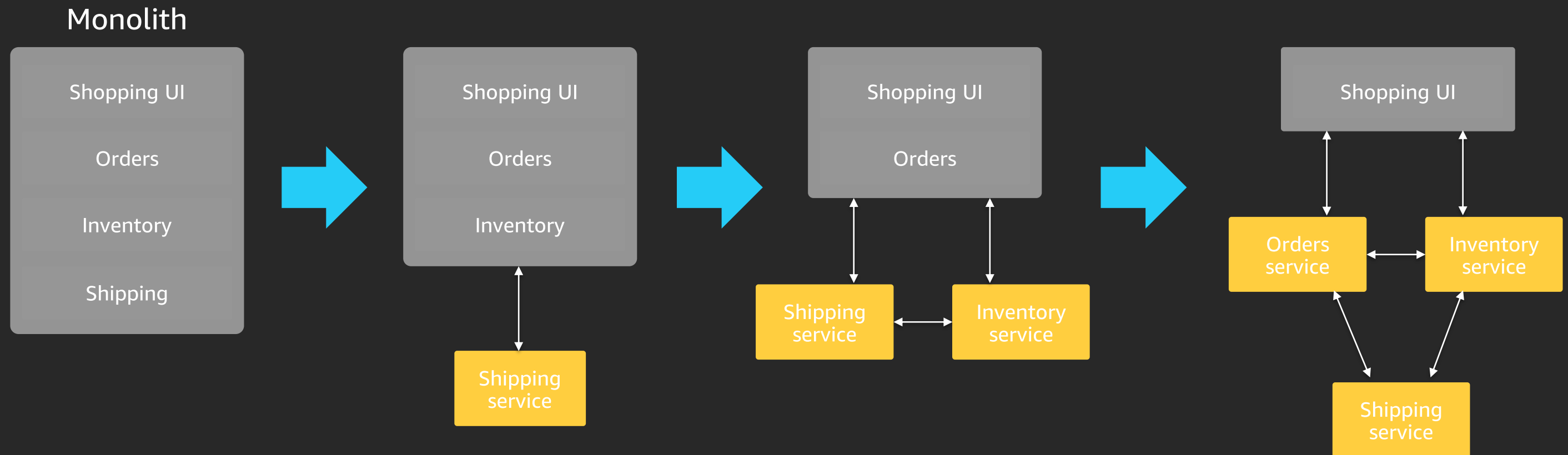
Microservices

“A software architecture style in which complex applications are composed of small, independent processes communicating with each other using language-agnostic APIs. These services are small, highly decoupled and focus on doing a small task, facilitating a modular approach to system-building.” –*Wikipedia*

Further reading:

<https://martinfowler.com/articles/microservices.html>

Monolith to microservices

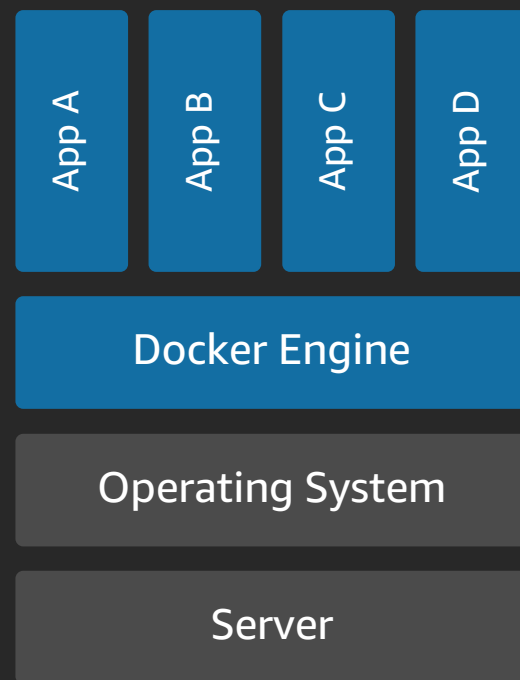


Strangler Application Pattern:

<https://www.martinfowler.com/bliki/StranglerApplication.html>

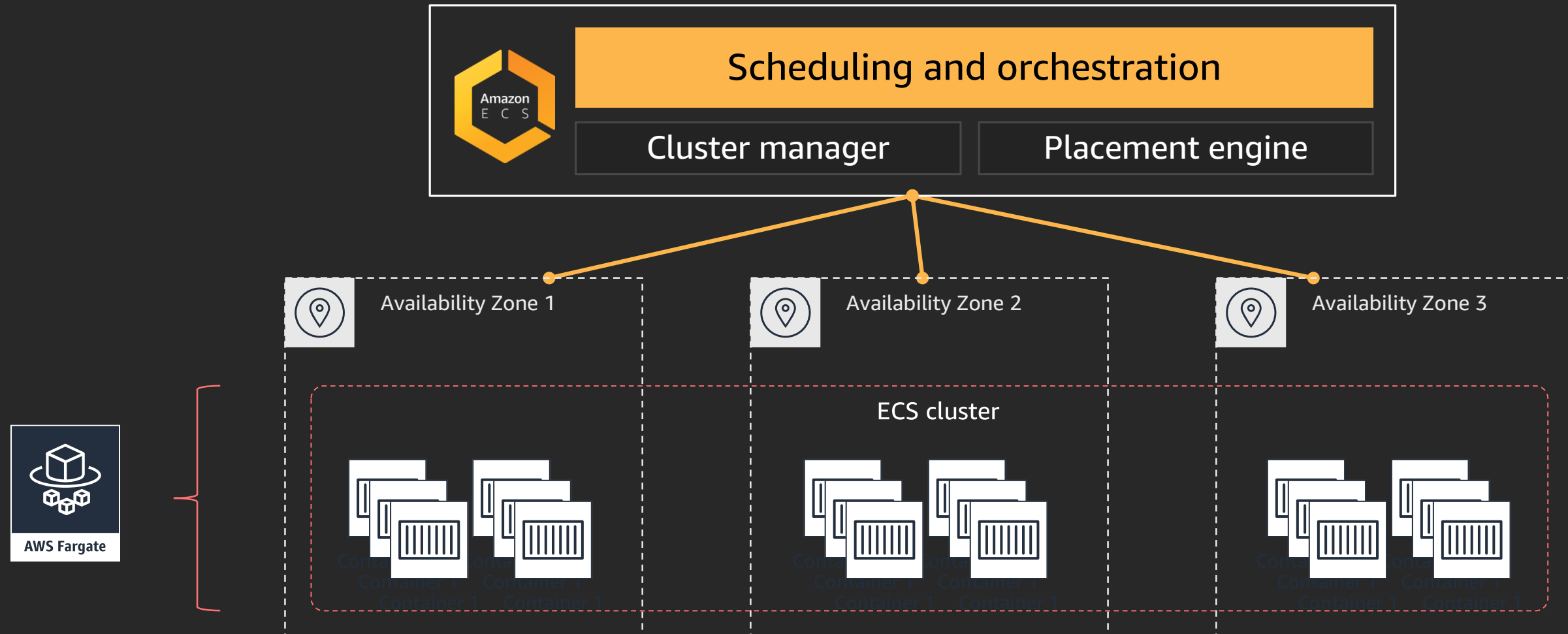
Containers and docker

A container is a standard **unit of software** that packages up **code and all its dependencies** so the application **runs quickly and reliably** from one computing environment to another.¹



¹ <https://www.docker.com/resources/what-container>

Amazon ECS and AWS Fargate



Hands-on lab



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.



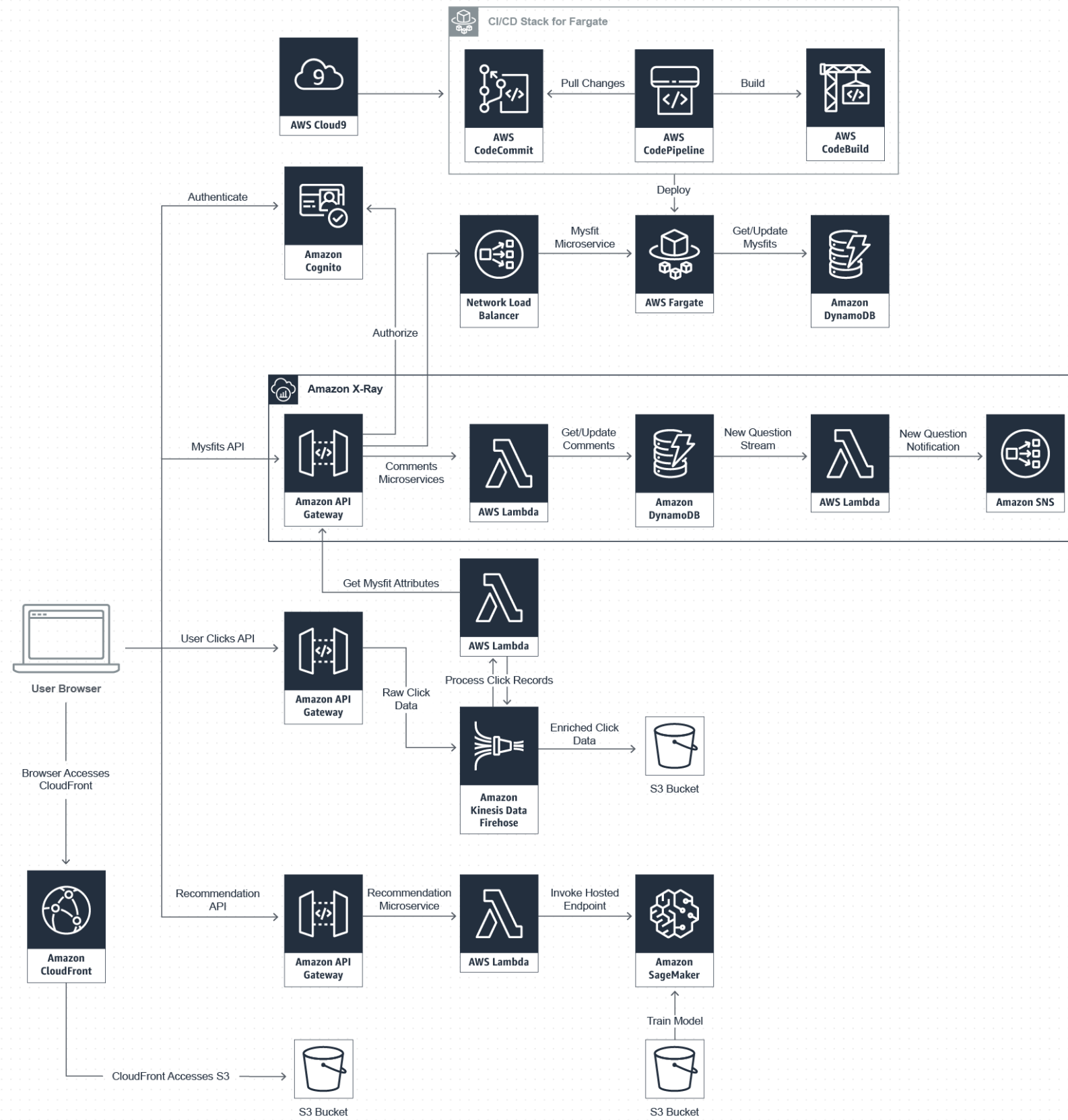
Help us find their forever homes!



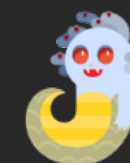
Your mission: Build the website www.mythicalmysfits.com



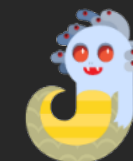
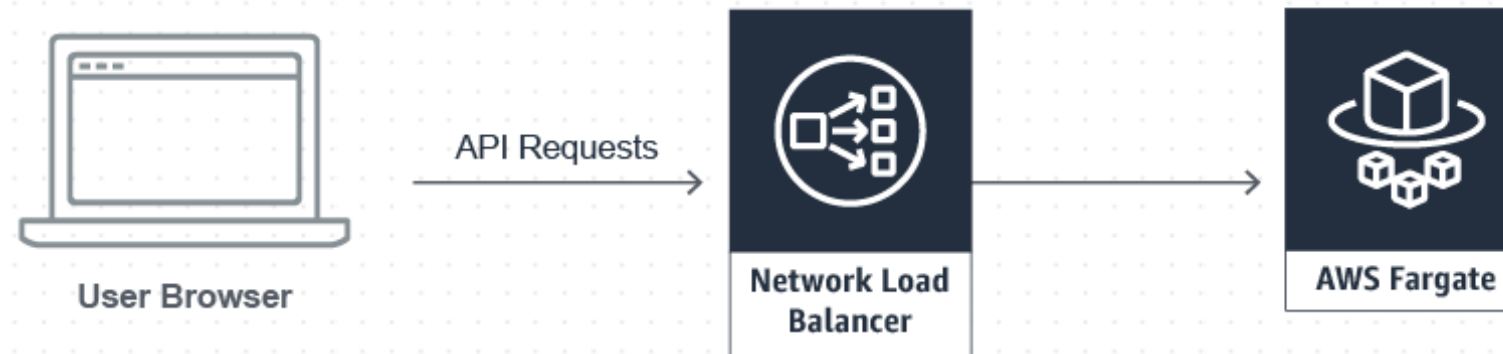
MYTHICAL MYSEITS



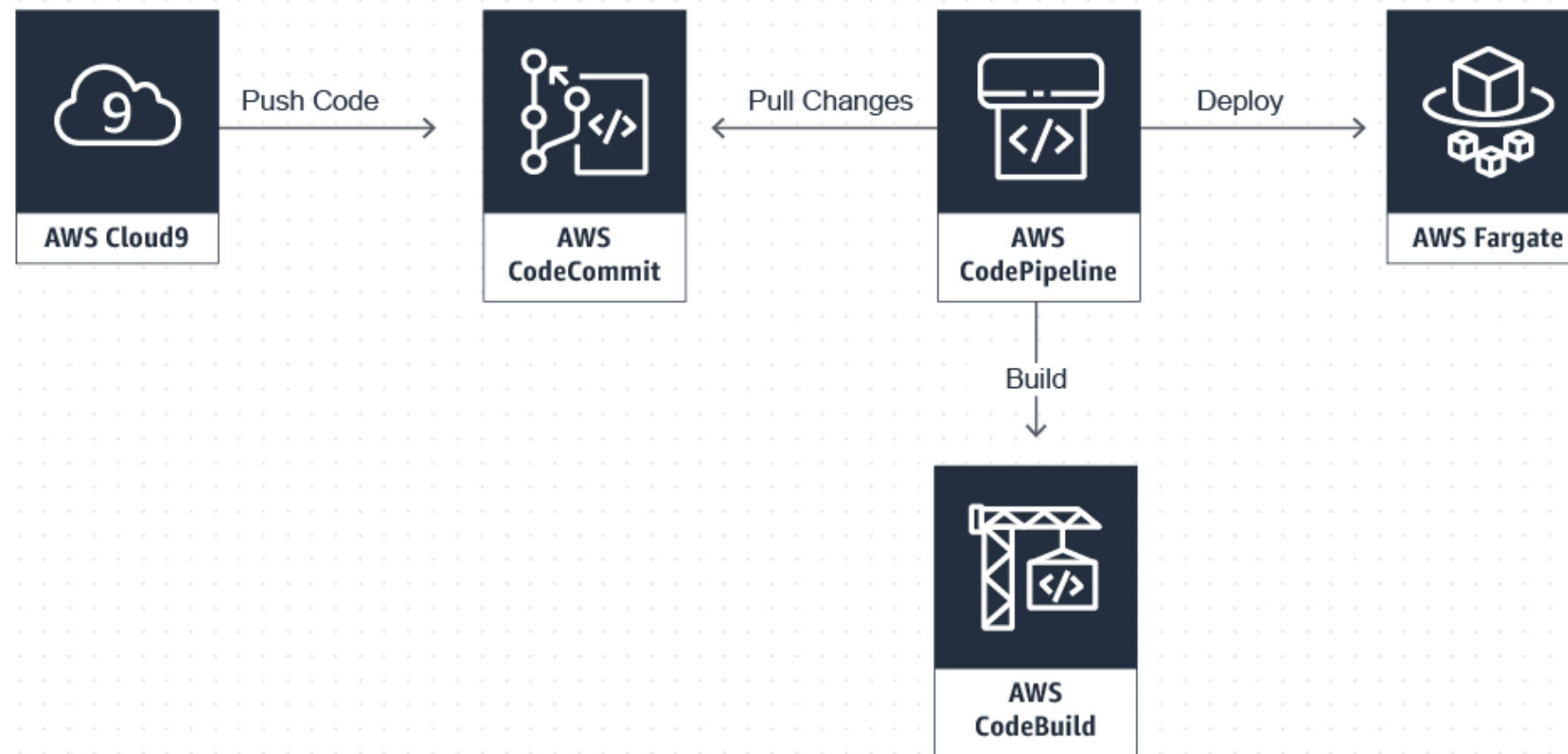
Module 1: A globally distributed static website



Module 2A: Serverless microservice using AWS Fargate



Module 2B: CI/CD pipeline



Module 3: DynamoDB is your data tier



Logistics



Instructions:

<https://mythicalmysfits.com/mad>

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 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-mythical-mysfits@amazon.com



Thank you!

Mridula Grandhi

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Please complete the session
survey in the mobile app.