



# Running Spring Boot apps in ECS

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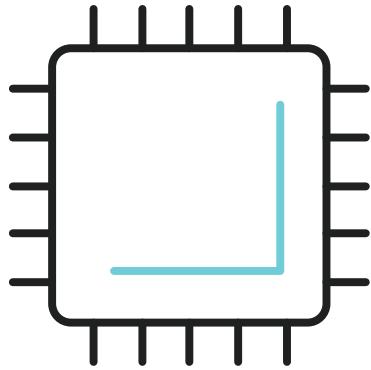


# Agenda

- Different compute options in AWS
- Use cases for containers
- Demo part



## AWS Compute Options



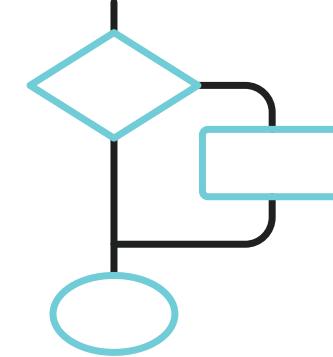
### AWS EC2

- On-Demand instances
- Reserved Instances
- Scheduled Instances
- Dedicated Hosts
- Dedicated Instances



### Containers

- AWS Elastic K8S Service
- AWS Elastic Container Service



### Serverless

- AWS Lambda
- AWS Fargate

## Use cases when containers work better

- Deploy in the hybrid environment, good for lift-and-shift
- Batch processing and service autoscaling
- Pay-as-you-go pricing model

[https://docs.aws.amazon.com/AmazonECS/latest/developerguide/common\\_use\\_cases.html](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/common_use_cases.html)



# ECS Launch Types

## EC2 Launch Type

- Workloads that require consistently high CPU core and memory usage
- Large workloads that need to be optimized for price
- Your applications need to access persistent storage
- You must directly manage your infrastructure

## Fargate Launch Type

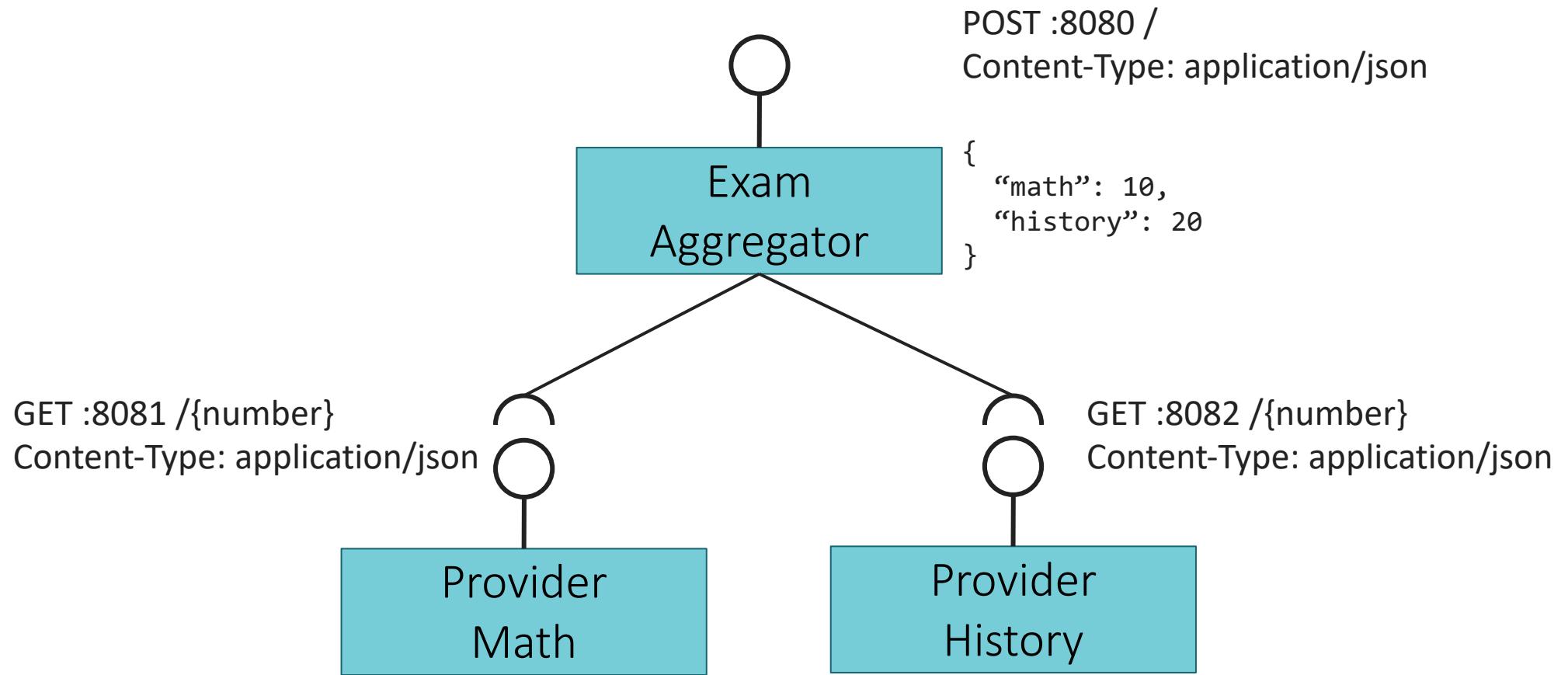
- Large workloads that need to be optimized for low overhead
- Small workloads that have occasional burst
- Tiny workloads
- Batch workloads
- [https://docs.aws.amazon.com/AmazonECS/latest/developerguide/AWS\\_Fargate.html](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/AWS_Fargate.html)

## External Launch Type

- Used to run containerized apps on on-premises server or VM that is registered in ECS cluster and managed remotely.
- <https://docs.aws.amazon.com/AmazonECS/latest/developerguide/ecs-anywhere.html>

[https://docs.aws.amazon.com/AmazonECS/latest/developerguide/launch\\_types.html](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/launch_types.html)

# Examinator Application



# Deployment and services



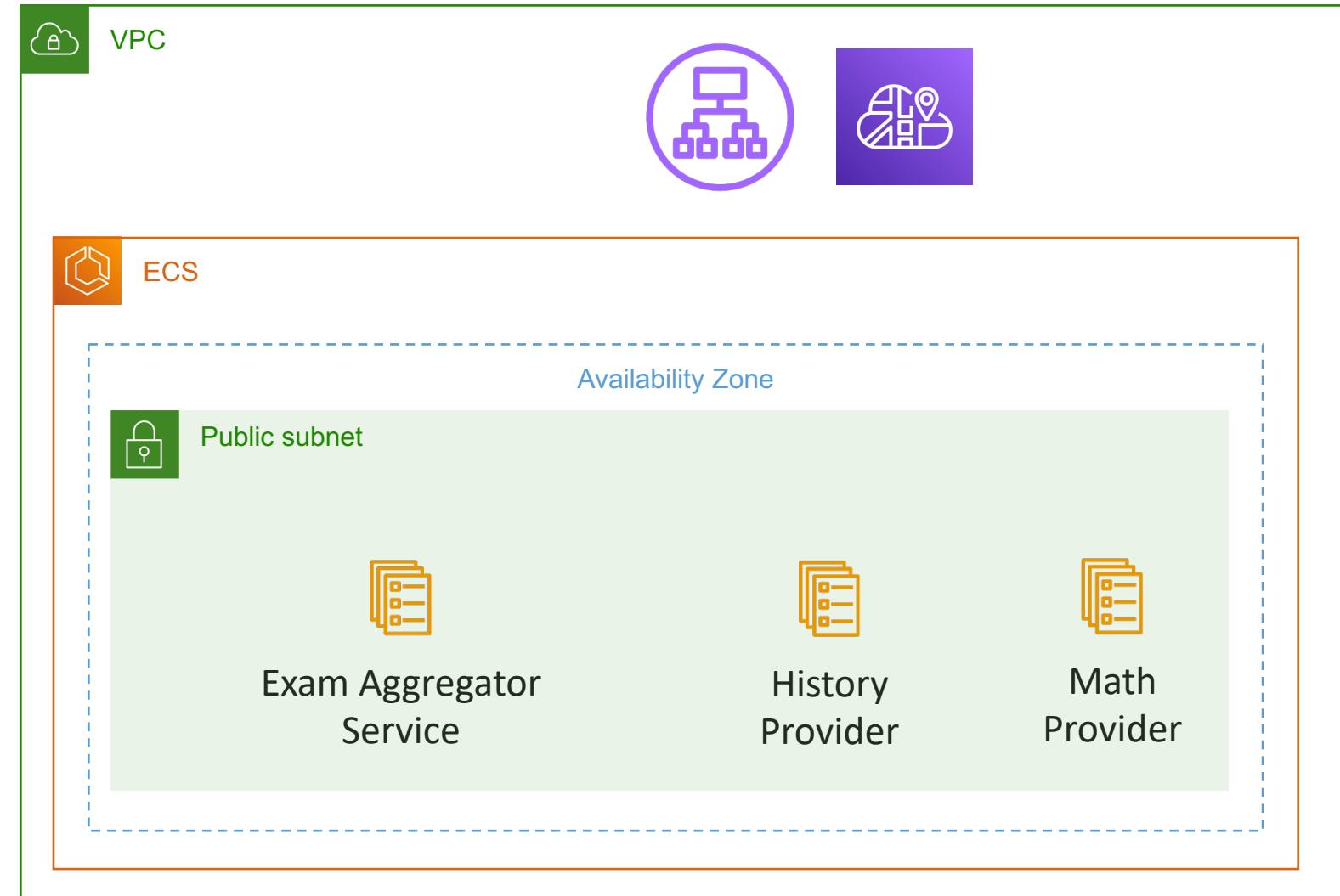
Sources



buildspec.yaml



Docker Images



# Demo time!

## Summary

- AWS ECS and EKS are two main services to run containers
- Three launch types – EC2, Fargate, External
- AWS Elastic Container Registry to store Docker images
- AWS CodeBuild to build apps in the cloud
- AWS ECS to run containers
- AWS CloudMap for service discovery
- <https://github.com/aabarmin.epam-ecs-java-example-2022>



# Thank you!