STUDENT VERSION (Week-13)

TEAMWORK

CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

▶ Icebreaking

▶ Questions

▶ Interview/Certification Questions

▶ Coding Challenge

▶ Video of the week

▶ Retro meeting

▶ Case study / project

Teamwork Schedule

Ice-breaking 10m

- Personal Questions (Stay at home & Corona, Study Environment, Kids etc.)
- Any challenges (Classes, Coding, AWS, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

Team work 10m

- Ask what exactly each student does for the team, if they know each other, if they care for each other, if they follow and talk with each other etc.

Ask Questions 15m

1. Which one is used to help restricting the service within the cluster? (Kubernetes)

A. LoadBalancer
B. NodePort
C. ClusterIP
D. kubectl

2. _____ runs on each node and ensures containers are running in a pod. (Kubernetes)

A. Kubelet
B. Etcd
C. Scheduler
D. Pod

3. Which is the intended use for etcd? (Kubernetes)

A. To store all the cluster data, maintain its state and provide access to critical data
B. To link a unique identifier to a value
C. To encrypt cluster data and send it to a secrets manager
D. To authenticate cluster data

4. Generally, what is a proxy service used for? (Kubernetes)

A. To supplant an authentic webpage in a search engine's index and search page results
B. To connect external parties and route data between internal and external containers
C. To act as an intermediary between an endpoint device and another server
D. To relay connection requests for inbound network traffic

5. _____ manages the assigning nodes to pods depending on resource availability. (Kubernetes)

A. Etcd
B. Kubectl
C. Scheduler
D. Flannel

Interview/Certification Questions 20m

1. Your company is planning on hosting an application that will be based on Docker containers. They need to setup an orchestration service that would automatically scale based on the load. As much as possible , the company does not want the burden of managing the underlying infrastructure. Which of the following can assist in this scenario?

A. AWS ECS with service Auto Scaling
B. Use an Elastic Load Balancer in front of an EC2 Instance. Use Docker containers on the EC2 Instance.
C. Use Auto Scaling with Spot Instances for the Orchestration Service.
D. Install and use Kubernetes on the EC2 Instance

2. You are launching the AWS ECS instance. You would like to set the ECS container agent configuration during the ECS instance launch. What should you do?

A. Set configuration in the ECS metadata parameter during cluster creation.
B. Set configuration in the user data parameter of ECS instance.
C. Define configuration in the task definition.
D. Define configuration in the service definition.

3. You work for a big company having multiple applications that are very different from each other. These applications are built using different programming languages. How could you deploy these applications as quickly as possible?

A. Develop all the apps in a single Docker container and deploy using Elastic Beanstalk.
B. Create a Lambda function deployment package consisting of code and any dependencies.
C. Develop each app in a separate Docker container and deploy using Elastic Beanstalk.
D. Develop each app in separate Docker containers and deploy using CloudFormation.

4. What is Kubectl?

5. Explain the concept behind Infrastructure as Code (IaC).

Video of the Week 5m

- Kubernetes in 5 mins

Retro Meeting on a personal and team level 10m

Ask the questions below:

- What went well?
- What could be improved?
- What will we commit to do better in the next week?

Coding Challenge 5m

- Compass

We assume that each group has two sub teams. Each week, one of the sub-teams will present their solution.

Case study/Project 10m

Case study should be explained to the students during the weekly meeting and has to be completed in one Sprint (2 weeks) by the students. Students should work in small teams to complete the case study.

- Project-203 : Microservice Architecture for Phonebook Web Application (Python Flask) with MySQL using Kubernetes.

Closing 5m

-Next week's plan

-QA Session
