STUDENT VERSION (DevOps-Week-5)







Meeting Agenda

- ► Icebreaking
- ► Microlearning
- **▶** Questions
- ► Interview/Certification Questions
- ► Coding Challenge
- ► Article of the week
- ► Video of the week
- ► Retro meeting
- ► Case study / project

Teamwork Schedule

Ice-breaking 5m

- 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 description best fits a DaemonSet? (Kubernetes)

- A. A way to run a copy of a pod on all or some nodes
- B. A method to manage clusters of pods
- C. A channel through which to pass information between two or more nodes
- **D.** A system to connect nodes and pods

2. Which of the component assigns new workload to worker node? (Kubernetes)

- A. kube-schedular
- B. kube-controller-manager
- C. kube-etdc
- D. kube-API-server

3. A Persistent Volume depends on the lifetime of a Pod! (Kubernetes)

- A. True
- **B.** False

4. Secrets cannot be mounted into pods via a volume! (Kubernetes)

- A. True
- B. False
- 5. The type of architecture in which your application is divided into multiple components and there's no single point of failure is known as(Kubernetes)
- A. Monoservice-based architecture
- **B.** Monolitic
- **C.** Microservice-based architecture
- D. Master-master architecture

Interview/Certification Questions

20m

- 1. For which of the following scenarios should a Solutions Architect consider using ElasticBeanStalk? (Choose Two)
- A. A web application using Amazon RDS
- B. An Enterprise Data Warehouse
- **C.** A long-running worker process
- **D.** Capacity provisioning and load balancing of website
- **E.** A management task run once on nightly basis
- 2. You have 2 development environments hosted in 2 different VPCs in an AWS account in the same region. There is now a requirement to access the resources of one VPC from another. How could this be accomplished?
- A. Establish a Direct Connect connection.
- **B.** Establish a VPN connection.
- C. Establish VPC Peering.
- D. Establish Subnet Peering.

Answer: C

A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately. Instances in either VPC can communicate with each other as if they are within the same network. You can create a VPC peering connection between your own VPCs, with a VPC in another AWS account, or with a VPC in a different AWS Region.

For more information on VPC peering, please visit the Link

3. You have an application developed in .NET. This applications works with the S3 buckets in a particular region. The application is hosted on an EC2 Instance. Which of the following should ideally be used to ensure that the EC2 Instance has the appropriate access to the S3 buckets?

- A. AWS Users
- **B.** AWS Groups
- C. AWS IAM Roles
- D. AWS IAM Policies
- 4. You are requested to expose your serverless application implemented with AWS Lambda to HTTP clients.(using HTTP Proxy)

Which of the following AWS services can you use to accomplish the task? (Select TWO)

- A. AWS Elastic Load Balancing (ELB)
- **B.** AWS Route53
- C. AWS API Gateway
- **D.** AWS Lightsail
- E. AWS Elastic Beanstalk
- 5. An application currently allows users to upload files to an S3 bucket. You want to ensure that the file name for each uploaded file is stored in a DynamoDB table. How could this be achieved? (SELECT TWO)
- **A.** Create an AWS Lambda function to insert the required entry for each uploaded file.
- **B.** Use AWS CloudWatch to probe for any S3 event.
- **C.** Add an event in S3 with notification send to Lambda.
- **D.** Add the CloudWatch event to the DynamoDB table streams section.

Article of the Week 10m

• Installation of a WordPress Page and a Database with Docker-Compose Using Secrets

Video of the Week 10m

• What is Helm?

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?

-QA Session

• Watching Free Disk Space Case study/Project 5m 10m

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

• Project-206: Microservice Architecture for Phonebook Web Application (Python Flask) with MySQL using Kubernetes.

Closing 5m

-Next week's plan