STUDENT VERSION (DevOps-Week-6)







Meeting Agenda

- ► Icebreaking
- **▶** Questions
- ► Interview/Certification Questions
- ► Coding Challenge
- ▶ 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. In which language Ansible modules written?
- A. Ruby
- **B.** Java
- C. Python
- D. YAML
- 2. Ansible uses agent/master architecture.
- A. True
- **B.** False
- 3. Which of the following has highest priority for Ansible configuration settings?
- **A.** ansible.cfg (in the current directory)
- **B.** .ansible.cfg (in the home directory)
- **C.** ANSIBLE_CONFIG (an environment variable)
- **D.** /etc/ansible/ansible.cfg

4. What will be happen after runing this command?

--- name: Apache installation for ubuntuservers
hosts: ubuntuservers
tasks:
- name: install the latest version of Apache
yum:
 name: apache2
 state: latest

- A. Installs latest version of Apache to all ubuntuservers
- B. Installs latest version of Apache to all ubuntuservers and enables it
- C. Installs Apache to all ubuntuservers and starts it
- **D.** Gives Error

5. What is a Kubernetes volume?

- A. The software within an OS that controls capacity allocation for nodes
- **B.** A directory for the data accessible to containers in a pod
- **C.** Layering software that puts apps into compartments for easier deployment
- **D.** Code that enables two software programs to communicate

Interview/Certification Questions

20m

- 1. What are Ad-hoc commands?
- 2. What is "idempotency"?
- 3. Your development team has just finished developing an application on AWS. This application is created in .NET and is hosted on an EC2 instance. The application currently accesses a DynamoDB table and is now going to be deployed to production. Which of the following is the ideal and most secure way for the application to access the DynamoDB table?
- A. Pass API credentials to the instance using instance user data.
- **B.** Store API credentials as an object in Amazon S3.
- **C.** Embed the API credentials into your JAR files.
- **D.** Assign an IAM role to the EC2 Instances

- 4. You have an application that has been dockerized. You plan to deploy the application in an AWS ECS cluster. As the application gets configuration files from an S3 bucket, the ECS containers should have the AmazonS3ReadOnlyAccess permission. What is the correct method to configure the IAM permission?
- **A.** Add an environment to the ECS cluster configuration to allow the S3 read only access.
- **B.** Add the AmazonS3ReadOnlyAccess permission to the IAM entity that creates the ECS cluster.
- **C.** Modify the user data of ECS instances to assume an IAM role that has the AmazonS3ReadOnlyAccess permission.
- **D.** Attach the AmazonS3ReadOnlyAccess policy to the ECS container instance IAM role. Attach this role when creating the ECS cluster
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- **B.** Add the AmazonS3ReadOnlyAccess permission to the IAM entity that creates the ECS cluster.
- **C.** Modify the user data of ECS instances to assume an IAM role that has the AmazonS3ReadOnlyAccess permission.
- **D.** Attach the AmazonS3ReadOnlyAccess policy to the ECS container instance IAM role. Attach this role when creating the ECS cluster

Video of the Week 10m

• Create Kubernetes cluster on Amazon EKS

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

Coding Challenge: Calculator

Case study/Project

10m

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

Closing 5m

- -Next week's plan
- -QA Session