STUDENT VERSION (DevOps-Week-1)

TEAMWORK

CLARUSWAY
WAY TO REINVENT YOURSELF

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**

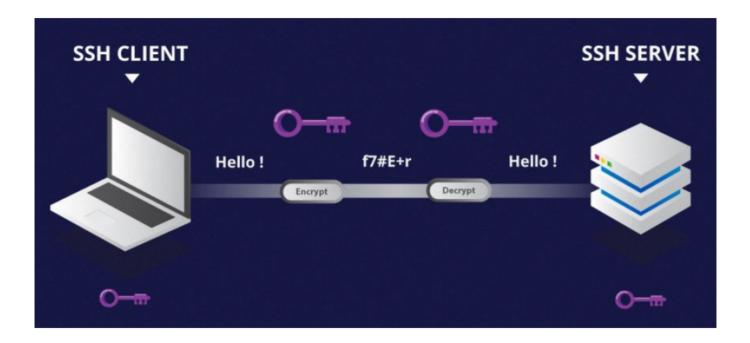- Personal Questions (Stay at home & Corona, Study Environment, Kids etc.)
- Any challenges (Classes, Coding, AWS, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

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.

Microlearning   **15m**

What is SSH command?

The **ssh** command provides a secure encrypted connection between two hosts over an insecure network. This connection can also be used for terminal access, file transfers, and for tunneling other applications.

Using the Linux client:

Linux typically uses the OpenSSH client. The ssh command to log into a remote machine is very simple. To log in to a remote computer which IP address is 172.31.7.57, type the following command at a shell prompt:

```
ssh 172.31.7.57
```

If this is the first time you use ssh to connect to this remote machine, you will see a message like:

```
The authenticity of host '172.31.7.57' cannot be established. DSA key fingerprint
is 04:48:30:31:b0:f3:5a:9b:01:9d:b3:a7:38:e2:b1:0c. Are you sure you want to
continue connecting (yes/no)?
```

Type **yes** to continue. This will add the server to your list of known hosts **(~/.ssh/known_hosts)** as seen in the following message:

```
Warning: Permanently added '172.31.7.57' (DSA) to the list of known hosts.
```

Each server has a host key *(A host key is a cryptographic key used for authenticating computers in the SSH protocol. Host keys are key pairs, typically using the RSA, DSA, or ECDSA algorithms. Public host keys are stored on and/or distributed to SSH clients, and private keys are stored on SSH servers.)*, and the above question related to verifying and saving the host key, so that next time you connect to the server, it can verify that it actually is the same server.

Once the server connection has been established, the user is authenticated. Typically, it asks for a password. For some servers, you may be required to type in a one-time password generated by a special hardware token.

Once authentication has been accepted, you will be at the shell prompt for the remote machine.

Specifying a different user name:

It is also possible to use a different username at the remote machine by entering the command as:

```
ssh alternative-username@172.31.7.57
```

The above can also be expressed with the syntax:

```
ssh -l alternative-username 172.31.7.57
```

Executing remote commands on the server:

The ssh command is often also used to remotely execute commands on the remote machine without logging in to a shell prompt. The syntax for this is:

```
ssh hostname command`
```

For example, to execute the command:

```
ls /tmp/doc
```

on host sample.ssh.com, type the following command at a shell prompt:

```
ssh 172.31.7.57  ls /tmp/doc
```

After authenticating to the remote server, the contents of the remote directory will be displayed, and you will return to your local shell prompt.

Note: The ssh command reads its configuration from the SSH client configuration file ``~/.ssh/config```.

Ask Questions   15m

1. How can we rename a branch ? (git)

A. git checkout -b new-branch-name
B. git branch checkout new-branch-name
C. git branch -m new-branch-name
D. git clone new-branch-name

2. What is the first step in the software development lifecycle?

A. System Design
B. Coding
C. System Testing
D. Preliminary Investigation and Analysis

3. Who prioritizes product backlog?

A. Product owner
B. Scrum team

C. Scrum master

D. All the above

4. When is a Sprint Retrospective ceremony performed?

A. Whenever the team suggests

B. At the end of each Sprint

C. Whenever needed

D. Whenever the Product Owner suggests

5. What are the main responsibilities of a Scrum Master?

A. Removing Impediments

B. Facilitating meeting as and when requested

C. Helps the Product Owner order the Product Backlog

D. Consulting the Development Team and Product Owner

E. Bridging the Gap between the Team and the Customer

Interview/Certification Questions   20m

1. Your organization is planning to migrate to AWS but the management is concerned about the cost and initial investment needed. Which of the following features of AWS pricing would help your firm to lower the initial investment required for the AWS migration? (Select 3 Options)

A. The ability to choose the lowest cost vendor

B. The ability to pay as you go

C. No upfront costs

D. Discounts on upfront payments

2. Why does it take between 24 to 48 hours for changes made to a hosted zone in Amazon Route53 to reflect globally?

A. AWS Name Servers need between 24 to 48 hours to create record sets, update their respective values and process changes.

B. DNS resolvers around the world can only reflect the changes in their cache after the Time To Live (TTL) has expired, it is 24 hours by default.

C. AWS Name Servers around the world update their cache in tandem, it takes between 24 hours to 48 hours for the process to complete.

D. If changes to the hosted zone are made in the same AWS Region as the DNS resolver, it can take between 6 to 12 hours.

3. Which of the following Amazon Web Services can be referred to as a serverless service? (Select three)

A. AWS Lambda
B. Elastic Load Balancing
C. AWS cloud9
D. Amazon DynamoDB

4. Which of the following services allows you to distribute load across multiple EC2 Instances?

A. AWS Autoscaling
B. AWS Elastic Load Balancer
C. AWS Regions
D. AWS IAM

5. 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

Article of the Week   10m

- What Is Software Development Life Cycle (SDLC)?

Video of the Week   10m

- Introduction to Scrum

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

- None

Case study/Project   7 / 7   10m

- None

Closing   5m

-Next week's plan

-QA Session