



Mentoring



CLARUSWAY©
WAY TO REINVENT YOURSELF

Class Schedule

- ▶ Agile, SDLC, Scrum, Jira
- ▶ Python
- ▶ Linux
- ▶ AWS
- ▶ Git
- ▶ DevOps
- ▶ Networking

Teamwork Schedule

Ice-breaking

10 minutes

- 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

10 minutes

- 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

20 minutes

- **What is the purpose of the OSI model?**
 - A. Enable users to access the internet
 - B. Improve the network performance by compressing data
 - C. To provide a set of standards for manufacturers
 - D. Make network devices such as a router, switch, hub communicate with each other
- **..... Layer is responsible for translation, encryption/decryption and compression/decompression of data.**
 - A. Session Layer
 - B. Presentation Layer
 - C. Transport Layer
 - D. Physical Layer
- **Which layer provides the logical addressing that routers will use for path determination?**
 - A. Network Layer
 - B. Datalink Layer
 - C. Transport Layer
 - D. Physical Layer
- **Explain MAC and IP addresses**
- **What is the purpose of the PYTHONPATH environment variable?**

- What are the built-in types available in Python?

Interview Questions

20 mins

- What are characteristics of Amazon S3?

Choose 2 answers from the options given below.

- A. S3 allows you to store objects of virtually unlimited size.
- B. S3 allows you to store virtually unlimited amounts of data
- C. S3 should be used to host a relational database.
- D. Objects are directly accessible via a URL.

- In Amazon S3, what is the difference between lifecycle policies and intelligent tiering?

- A. Lifecycle policies are not dependent on access patterns as is the case with intelligent tiering, instead they are pre-configured with a transition rule.
- B. Intelligent tiering is an object storage class which is not dependent on access patterns, it uses a pre-configured transition rule.
- C. When transitioning objects into different storage classes, intelligent tiering is automatic whilst lifecycle policies have to be manually triggered.
- D. Lifecycle policies cannot be configured to permanently delete objects from an S3 bucket whilst intelligent tiering can do so if versioning is turned on.

- Which of the following is the amount of storage that can be stored in the Simple Storage service?

- A. 1 TB
- B. 5 TB
- C. 1 PB
- D. Virtually unlimited storage

- You have an application developed in .NET. This application 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
- A company wants to utilize aws storage. For them low storage cost is paramount, the data is rarely retrieved, and data retrieval times of several hours are acceptable for them. What is the best storage option to use?
 - A. AWS Glacier
 - B. AWS S3 Reduced Redundancy Storage
 - C. EBS backed storage connected to EC2
 - D. AWS CloudFront

Video of the Week

15 mins

What is DevOps?

https://www.youtube.com/watch?time_continue=1&v=I94-tJlovvg&feature=emb_title

Survey

10 minutes

- Which topic was interesting/exciting/easy for you?
- Which topic was boring/hard for you?
- What are the things you liked?
- What are the things you didn't like?

Retro Meeting On a personal and team level 10 mins

Below questions for the week before the break but you can also ask these questions for the break period. It can be beneficial to hear students' opinions about how they did in terms of studying, practicing during the break.

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

Problem of the week: 5 mins

Students should work in small teams to complete the problem of the week.

THE RAINBOW PATH

goldfish	lobster	emerald	ruby
garfield	frog	jack o'lantern	sapphire
denim	sun	ocean	santa claus
grass	dory	nemo	sky
charmander	cardinal	target	stop sign
cookie monster	oriole	jade	twitter
cobalt	rubber duck	tiger	leprechaun
basketball	blood	yoshi	traffic cone

Answer: _ _ _ _ _

Presentation of Coding Challenge & POW

20 mins

We assume that each group has two sub teams. If this is possible one of the sub teams will present the coding challenge of last week. The other sub team will present the solution to the previous problem of the week. If there is only one sub team then, the sub team will present both of the solutions.

Coding Challenge

5 mins

Students should work in small teams to complete the case study.

- Your task is to make a function that can take any non-negative integer as an argument and return it with its digits in descending order. Essentially, rearrange the digits to create the highest possible number.

Examples:

Input: 21445 Output: 54421

Input: 145263 Output: 654321

Input: 123456789 Output: 987654321

Case study

0 mins

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.

***No additional Case study this week.
Case study provided W15 is for one sprint (2 weeks)***

Closing

5 mins

- Next week's plan
- QA Session