

STUDENT VERSION (Week-8)



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 Git command downloads commits, files, and refs from a remote repository into your local repo, but it doesn't integrate any of this new data into your working files?

- A. clone
- B. pull
- C. fetch**
- D. merge
- E. push

The **git fetch command** downloads commits, files, and refs from a remote repository into your local repo. Fetching is what you do when you want to see what everybody else has been working on.

2. What is AWS' serverless computing service?

- A. AWS Serverless
- B. AWS CloudFront
- C. AWS Lambda**
- D. AWS API Gateway

Serverless on AWS. ... Lambda is an **event-driven compute service** that enables you to run code in response to events from over 200 natively-integrated AWS and SaaS sources - all without managing any servers.

3. What is the service provided by AWS that allows developers to easily deploy and manage applications on the cloud?

- A. Cloudformation
- B. Elastic Beanstalk**
- C. Route 53
- D. Container Service

AWS Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS.

You can simply upload your code and Elastic Beanstalk automatically handles the deployment, from capacity provisioning, load balancing, auto-scaling to application health monitoring. At the same time, you retain full control over the AWS resources powering your application and can access the underlying resources at any time.

4. Using API Gateway, you can create SOAP APIs.

- A. True
- B. False**

While **SOAP is no longer supported on the AWS API Gateway**, you can still include legacy SOAP requests in your new shiny cloud infrastructure, at least for a transition period. Of course the „soap legacy“ resource requires further development; eg. Dec 21, 2016

The screenshot shows the AWS API Gateway console's 'Choose an API type' dialog. It presents two options: HTTP API and WebSocket API. The HTTP API option is highlighted and described as a low-latency, cost-effective REST API with built-in features like OAuth2 and CORS support. It works with Lambda, HTTP, and other services. The WebSocket API option is described as a persistent connection API for real-time use cases like chat or dashboards, also working with Lambda, HTTP, and AWS services. Both options include 'Import' and 'Build' buttons.

5. A company requires to deploy an existing Java-based application to AWS. Which of the following should be used to fulfill this requirement in the quickest way possible?

- A. Deploy to an S3 bucket and enable website hosting.
- B. Use the Elastic Beanstalk service to provision the environment.**
- C. Use EC2 with Auto Scaling for the environment.
- D. Use AMIs to build EC2 instances for deployment

Interview/Certification Questions

20m

1. You are planning on deploying a video based application onto the AWS Cloud. These videos will be accessed by users across the world. Which of the below services can help stream the content in an efficient manner to the users across the globe?

- A. Amazon Route 53.
 - B. Amazon Cloudtrail
 - C. Amazon CloudFront**
 - D. Amazon S3
- What is AWS CloudFront?
Amazon CloudFront is a **fast content delivery network (CDN) service** that securely delivers data, videos, applications, and APIs to customers globally with low latency, high transfer speeds, all within a developer-friendly environment.

2. Which of the following components of the Cloudfront service can be used to distribute contents to users across the globe?

- A. Amazon VPC
 - B. Amazon Regions
 - C. Amazon Availability Zones
 - D. Amazon Edge Locations**
- Edge locations are **AWS data centers designed to deliver services with the lowest latency possible**. Amazon has dozens of these data centers spread across the world. They're closer to users than Regions or Availability Zones, often in major cities, so responses can be fast and snappy. May 7, 2021

3. A professional educational institution maintains a dedicated web server and database cluster that hosts an exam results portal for modules undertaken by its students. The resource is idle for most of the learning cycle and becomes excessively busy when exam results are released. How can this architecture be improved to be cost-efficient?

- A. Configure AWS elastic load-balancing between the webserver and database cluster
- B. Configure RDS multi-availability zone for performance optimisation
- C. Configure serverless architecture leveraging AWS Lambda functions**
- D. Migrate the web servers onto Amazon EC2 Spot Instances

4. Which of the following is the customer's responsibility with respect to the AWS Lambda service? (choose 2 options)

- A. Lambda function code.**
- B. Monitoring and logging lambda functions.
- C. Security patches.
- D. Installing required libraries in underlying compute instances for Lambda execution.
- E. Providing access to AWS resources that triggers a Lambda function.**

For AWS Lambda, AWS manages the underlying infrastructure and foundation services, the operating system, and the application platform. You are responsible for the security of your code and identity and access management (IAM) to the Lambda service and within your function.

5. You have built a REST API using API gateway and distributed to your customers. However, your API is receiving large number of requests and overloading your backend system causing performance bottlenecks and eventually causing delays and failures in serving the requests for your important customers. How would you improve the API performance? (Choose 2 options)

- A. Enable throttling and control the number of requests per second.**
- B. Create a resource policy to allow access for specific customers during specific time period.
- C. Enable API caching to serve frequently requested data from API cache.**
- D. Enable load balancer on your backend systems.

Video of the Week

10m

- [AWS Lambda Tutorial](#)

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: Find the Non-Repeated Values](#)

Case Study/Project

10m

- [Project-006 : Kittens Carousel Static Website deployed on AWS Cloudfront, S3 and Route 53 using Cloudformation](#)

Closing

5m

-Next week's plan

-QA Session
