# Lab 09 - the Cafe - Challenges 1 and 2

In this lab, you'll follow a conversation about building a static and a dynamic website for the Cafe. Meanwhile, you'll begin constructing the website by completing the given tasks. Please note that this lab doesn't provide detailed instructions like previous labs. For example, it might ask you to create a bucket without specific steps. Use your current knowledge and online resources like AWS documentation and Stack Overflow to find solutions. If you need a refresher or encounter unfamiliar topics, several tutorials on relevant services are provided below. Your instructor is also available to answer any questions.

In these labs, you take the perspective of a cloud architect as you think about how to approach cloud network design. As a cloud architect working with Amazon S3, you need to consider access patterns and use cases of the business so that you can choose Amazon S3 configuration options that optimize cost while supporting performance and compliance requirements. You also need to apply security best practices so that the storage layer is protected against unwanted access and accidental data loss. Keep these considerations in mind as you progress through these labs. Also remember that the cloud architect should work backward from the business need to design the best architecture for a specific use case. As you progress through the labs, consider the café scenario presented in the course as an example business need, and think about how you would use Amazon S3 storage for the café.

I highly recommend keeping each lab's student guide page open as you complete the lab, since it provides background information.

Submission instructions are included within the lab instruction.

## Challenge (Cafe) lab 1: Creating a Static Website for the Cafe (AWS S3)

https://awsacademy.instructure.com/courses/100621/assignments/1098585?module\_item\_id=9324428

**Student Guide** for Adding a Storage Layer with Amazon S3: <u>https://awsacademy.instructure.com/courses/100621/modules/items/9324411</u>

## Lab 1 - Tutorials

Guided lab: IAM Lab https://awsacademy.instructure.com/courses/100621/modules/items/9324418

Demo: Amazon S3 Transfer Acceleration https://awsacademy.instructure.com/courses/100621/modules/items/9324418

Storing content with Amazon S3 https://awsacademy.instructure.com/courses/100621/modules/items/9324419 Demo: Managing lifecycles in Amazon S3 https://awsacademy.instructure.com/courses/100621/modules/items/9324421

Demo: Amazon S3 versioning https://awsacademy.instructure.com/courses/100621/modules/items/9324423

Designing with Amazon S3 https://awsacademy.instructure.com/courses/100621/modules/items/9324425

Applying the AWS Well-Architected Framework principles to storage <u>https://awsacademy.instructure.com/courses/100621/modules/items/9324431</u>

# Challenge (Cafe) lab 2: Creating a Dynamic Website for the Café (AWS EC2)

https://awsacademy.instructure.com/courses/100621/assignments/1098577?module\_item\_id=9324462

**Student Guide**: Adding a Compute Layer Using Amazon EC2 <u>https://awsacademy.instructure.com/courses/100621/modules/items/9324438</u>

## Lab 2 - Tutorials

Guided lab: Introducing Amazon Elastic File System (Amazon EFS) <u>https://awsacademy.instructure.com/courses/100621/assignments/1098622?module\_item\_id=9324452</u>

Adding compute with Amazon EC2 https://awsacademy.instructure.com/courses/100621/modules/items/9324442

Choosing an AMI to launch an EC2 instance <u>https://awsacademy.instructure.com/courses/100621/modules/items/9324444</u>

Selecting an EC2 instance type https://awsacademy.instructure.com/courses/100621/modules/items/9324447

Adding storage to an Amazon EC2 instance https://awsacademy.instructure.com/courses/100621/modules/items/9324450

Other EC2 configuration considerations <u>https://awsacademy.instructure.com/courses/100621/modules/items/9324454</u>

#### Demo: Configuring an EC2 Instance with User Data

https://awsacademy.instructure.com/courses/100621/modules/items/9324456

### Amazon EC2 pricing options

https://awsacademy.instructure.com/courses/100621/modules/items/9324458

### Demo: Reviewing the Spot Instance History Page

https://awsacademy.instructure.com/courses/100621/modules/items/9324461

Applying the AWS Well-Architected Framework principles to compute <u>https://awsacademy.instructure.com/courses/100621/modules/items/9324464</u>

Good Luck!