



Café and Bakery

Understanding Systems Operations: Project Scenario

Use case introduction

Café and bakery



In this and subsequent lessons, you will solve a business case problem by using the AWS services that you learn.

You will now learn how Amazon Web Services (AWS) services can assist with this business case.

AWS and the real world

Amazon Web Services (AWS) provides a broad array of service categories, such as the following:

- Compute
- Storage
- Databases
- Analytics

AWS provides large organizations and small businesses with cloud-based solutions so that they can do the following:

- Move their operations forward faster
- Reduce costs
- Scale based on demand

Project objectives

On completion of this project, you will be able to do the following:

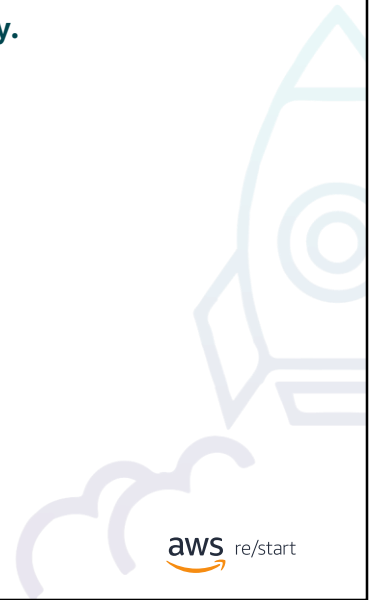
- Describe the communication challenges that you might encounter when you apply technology as the solution to business problems.
- Translate customer requirements into a proposed technical solution.
- Present the proposed solution to the customer.
- Use AWS best practices for a frugal, resilient, and secure solution.

Within this project, learners will experience communication challenges usually encountered when using technology to solve a business problem and will be able to describe those challenges. Learners will translate customer requirements into a solution that uses AWS services in a manner that reflects AWS best practices. They will also present their solution to the customer. When developing these requirements, learners should consider implementing AWS best practices for a frugal, resilient, and secure solution.

Café and bakery introduction

Prepare to meet with your new customer, the café and bakery.

- Review the research gathered about the new client.
- Help the customer determine which AWS services will be a solution.



You are preparing to meet with your new customer, the café and bakery. The café is a new AWS customer and wants to explore using AWS services. You are now going to review the business introduction so that you know more about your customer when you determine a solution.

Café and bakery

Frank's retirement dreams became a reality when he and his wife, Martha, opened a café and bakery in 2016.



The café and bakery was established in 2016.

The café and bakery is Frank's retirement dream. The owners, Frank and Martha, wanted to do something that included their love of baking and supplemented their income. They love interacting with their local community and supporting community events across town with their baked goods and coffees.

Frank and Martha decided to open a café and bakery in 2016. Their daughter, Sofia, and a secondary school student, Nikhil, help them and also work at the cafe. Since then, the café has experienced an increase in local business and inquiries from people who travel through the area either for business or as a tourist.

The café and bakery caters to different customers. Some customers want an early breakfast. Other customers need an order to go, whether they are part of the afternoon lunch traffic or commuters.

Frank



Age: 64

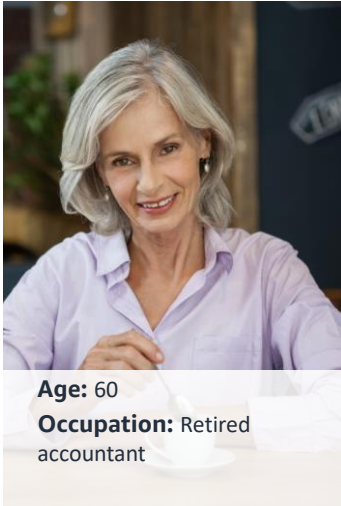
Occupation: Retired military (Navy)

	Novice	Expert								
Technology	<input type="range" value="1"/>									
	Novice	Expert								
Computer skills	<input type="range" value="1"/>									
	Linux	macOS	Windows							
Operating System	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
	1	2	3	4	5	6	7	8	9	10
AWS knowledge	<input type="range" value="1"/>									

Frank loves to bake, and he uses his mother's recipes.

He enjoys owning and running the café, but he realizes that he cannot do everything. Sofía reminds Frank that technology might benefit the café's operations. He is interested in expanding the global presence of the café with the help of Sofía and Nikhil.

Martha



Age: 60

Occupation: Retired accountant

Technology	Novice	Expert								
Computer skills	Novice	Expert								
Operating System	Linux	macOS	Windows							
AWS knowledge	1	2	3	4	5	6	7	8	9	10

Martha is a retired accountant, and she handles the café's accounts and finances. She knows how to use basic technology and is an expert at using spreadsheets.

She enjoys working at the café but wants to spend less time doing administrative tasks.

Sofía



Age: 22

Occupation: Café manager
and future business student

Technology	Novice	Expert								
Computer skills	Novice	Expert								
Operating System	Linux	macOS	Windows							
AWS knowledge	1	2	3	4	5	6	7	8	9	10

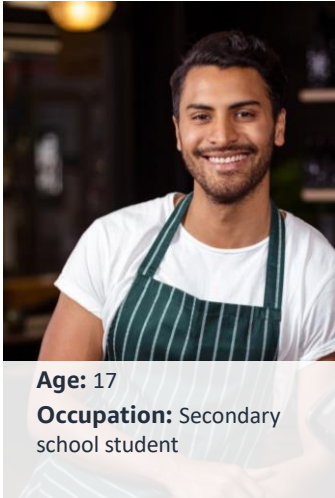
Sofía will be attending university soon to study business. She currently runs the café and manages the supply orders and ingredient inventory. She also makes sure that deliveries are completed.

She also likes programming. She took some programming classes in secondary school and thinks they would work well with a graduate degree in business.

Sofía just learned about Amazon Web Services and told Frank and Martha that the café could use AWS services to automate the business. She knows that AWS services could help them focus more on what they want to do and reduce their administrative work.

She heard about AWS from one of her regular customers, Alejandro.


Nikhil



Technology	Novice	Expert								
Computer skills	Novice	Expert								
Operating System	Linux	macOS	Windows							
AWS knowledge	1	2	3	4	5	6	7	8	9	10

Nikhil will graduate from secondary school soon. He is responsible for maintaining the store and delivering orders. He has also started serving customers and is looking forward to handling more responsibilities when Sofía goes to school.

Nikhil has design skills and he also enjoys technology; he designed the café's first website. He wants to use the website to expand the social media marketing presence of the café.



AWS team introduction

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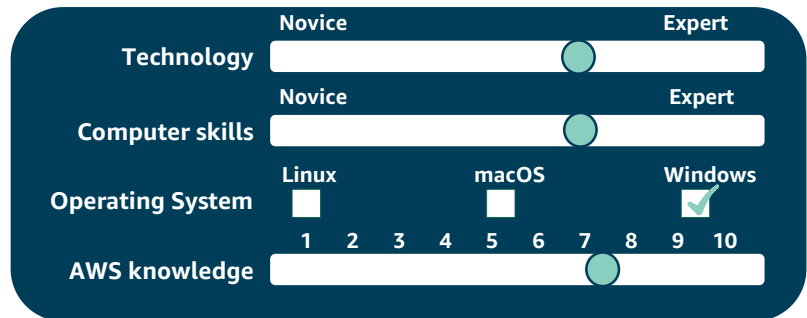
Now, you will learn about the AWS team that will be assisting the café and bakery.

Alejandro



Age: 25

Occupation: AWS technical account manager (TAM)



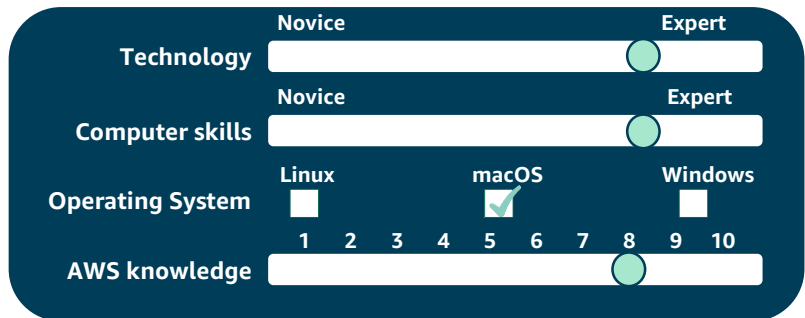
Alejandro is an AWS technical account manager (TAM). He is a regular café customer, and Sofía told him about the café's website. He wants to help the café expand their AWS presence and help the café do more, especially because they want to go global.

Olivia



Age: 31

Occupation: AWS solutions architect (SA)



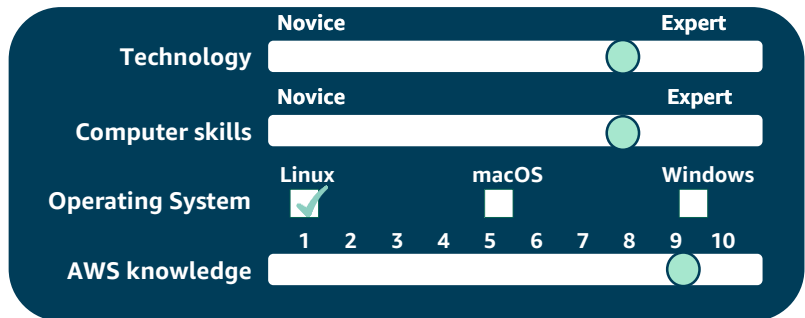
Olivia is an AWS solutions architect (SA). She used to be a network engineer and is an expert on advanced networking. She enjoys troubleshooting a problem and creating frugal, resilient, and secure solutions for customers.

Mateo



Age: 29

Occupation: AWS senior systems operations (SysOps) engineer



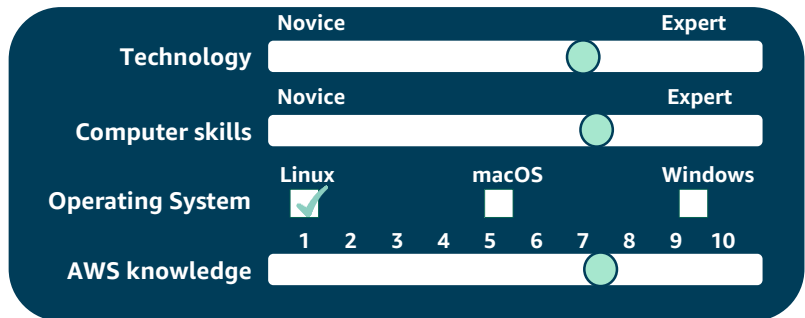
Mateo is an experienced AWS SysOps engineer with a software development background. He is an expert on automation and implementing fault tolerance to a solution. He is also knowledgeable about security policies and providing options for disaster recovery (DR).

Faythe




Age: 22

Occupation: AWS developer



Faythe is an AWS developer who is interested in security and big data. She enjoys creating solutions that apply the appropriate technology to a business problem.



The café and bakery, and AWS

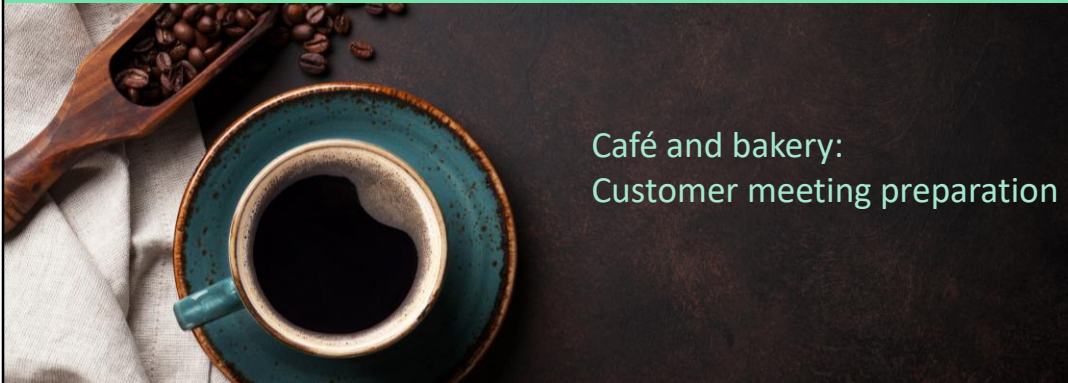
Café and bakery business need

The café and bakery has a business need that the AWS team can help solve by using AWS services.



You will explore the problem more.

Sofia has a lot of AWS support for her café, and they are all specialists in different areas. She sees this as a good opportunity to enhance the café's internet presence, especially on a global scale. Through her interaction with an AWS TAM, she can engage with an AWS SA, a SysOps engineer, and a developer to design the right solution for the café and bakery.



Café and bakery: Customer meeting preparation

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You will now begin to prepare for your customer meeting, where the customer will propose a new problem and you will help them find a solution.

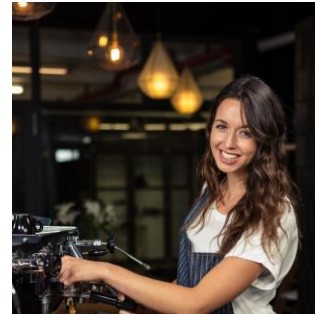
Request to install the AWS CLI

Business need: AWS Command Line Interface (AWS CLI) and AWS Identity and Access Management (IAM)



Mateo:

Sofía, how is that new AWS account?
Do you need any help?



Sofía:

Hi, Mateo. I have some questions about the AWS CLI and getting that installed. Do you mind helping with the AWS CLI?

The customer has a request to install the AWS Command Line Interface (AWS CLI).

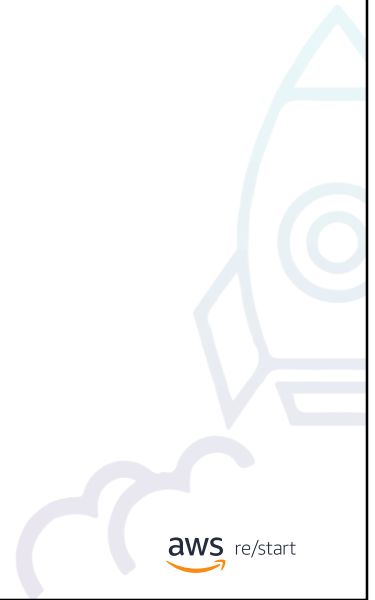
When Mateo comes in for coffee, he asks Sofía if she needs any help with establishing her new AWS account. Sofía mentions that she could use some help with the following:

- Installing the AWS Command Line Interface (AWS CLI)
- Establishing AWS Identity and Access Management (IAM) controls for Nikhil and herself

Activity

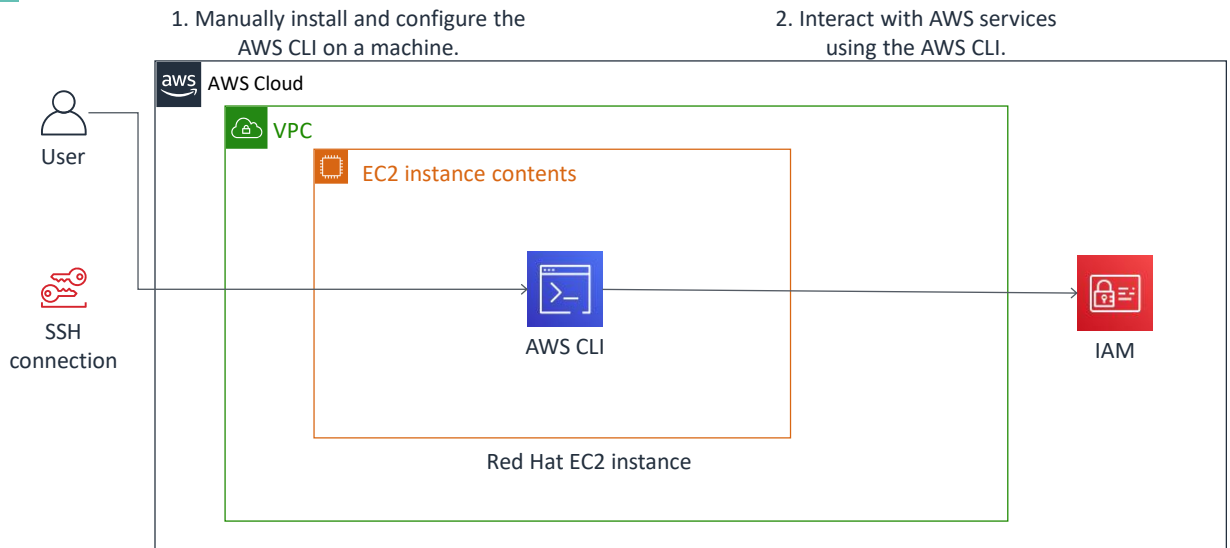
Install and practice using the AWS CLI

In this activity, you will practice installing the AWS CLI. A Red Hat Linux instance that does not have the AWS CLI installed on it is provided for you on Amazon Elastic Compute Cloud (Amazon EC2).



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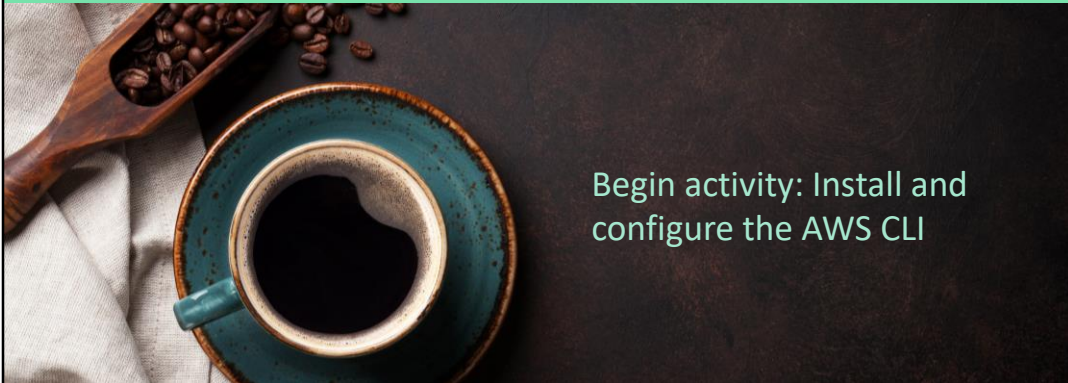
Activity: Install, configure, and practice using the AWS CLI



The diagram on this slide summarizes the activities that you will complete in this scenario.

You will establish a Secure Shell (SSH) connection to the instance. Then, you will configure the installation with an access key that can connect to an AWS account. Finally, you will practice using the AWS CLI to interact with IAM.

For accessibility: The diagram shows that the you will manually install and configure the AWS CLI on the Red Hat EC2 instance. The instance resides within a virtual private cloud (VPC) on the AWS Cloud. An SSH connection is shown, connecting to the AWS CLI and then to IAM. **End of accessibility description.**



Begin activity: Install and
configure the AWS CLI

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You can now begin the activity. Feel free to ask your instructor for assistance.

Checkpoint questions

1. Why would a developer use the AWS CLI instead of the AWS Management Console?
2. Does the solution architecture change by using the AWS CLI instead of the console?



1. Why would a developer use the AWS CLI instead of the AWS Management Console?

A developer would use the AWS CLI instead of the AWS Management Console to automate the creation and building of an infrastructure.

2. Does the solution architecture change by using the AWS CLI instead of the console?

No, the solution architecture does not change. Only the implementation method for the solution changes. With the AWS CLI, you can expedite tasks related to administration by running hundreds of commands through a file.



Troubleshooting Knowledge Base

Project

Troubleshooting Knowledge Base

- Have your copy of the Troubleshooting Knowledge Base template open for editing.
- Create new entries as you encounter troubleshooting situations.
- This section focuses on the following categories:
 - **Security**
 - **Automation**

Be ready to create some entries in your Troubleshooting Knowledge Base document based on the Systems Operations topics.

For these topics, add entries in the Security category of your knowledge base. You can also create entries in the Automation category for other general issues that you troubleshoot.



Thank you



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