Amazon Simple Notification Service (Amazon SNS)

Amazon Simple Notification Service (Amazon SNS) is a **publish/subscribe** service. Using Amazon SNS **topics**, a **publisher publishes messages to subscribers**. This is similar to the coffee shop; the cashier provides coffee orders to the barista who makes the drinks.

Amazon SNS is similar to SQS in that it is used to send out messages to services, but it can **also send out notifications to end users**. It does this in a different way called a publish/subscribe or **pub/sub model**. This means that you can create something called an **SNS topic which is just a channel for messages** to be delivered.

Additionally, SNS can be used to **fan out notifications to end users using mobile push, SMS, and email.** Taking this back to our coffee shop, we could send out a notification when a customer's order is ready. This could be a simple SMS to let them know to pick it up or even a mobile push.

Step

Serverless computing

Earlier in this module, you learned about Amazon EC2, a service that lets you run virtual servers in the cloud. If you have applications that you want to run in Amazon EC2, you must do the following: 1

1) Provision instances (virtual servers).

2) Upload your code.

3) Continue to manage the instances while your application is running.

**EC2 requires that you set up and manage your fleet of instances** over time. When you're using EC2, **you are responsible for patching your instances** when new software packages come out, **setting up the scaling** of those instances as well as ensuring that you've architected your solutions to be hosted in a highly available manner. This is still not as much management as you would have if you hosted these on-premises. But management processes will still need to be in place.

**The term “serverless” means that your code runs on servers, but you do not need to provision or manage these servers.** With serverless computing, you can focus more on innovating new products and features instead of maintaining servers.

Serverless means that you **cannot actually see or access the underlying infrastructure** or instances that are hosting your application.

Instead, all the **management of the underlying environment from a provisioning, scaling, high availability, and maintenance perspective are taken care of** for you. All you need to do is focus on your application and the rest is taken care of

Another benefit of serverless computing is the **flexibility** to scale serverless applications automatically.