Migrating and Hosting Web Application on AWS Cloud

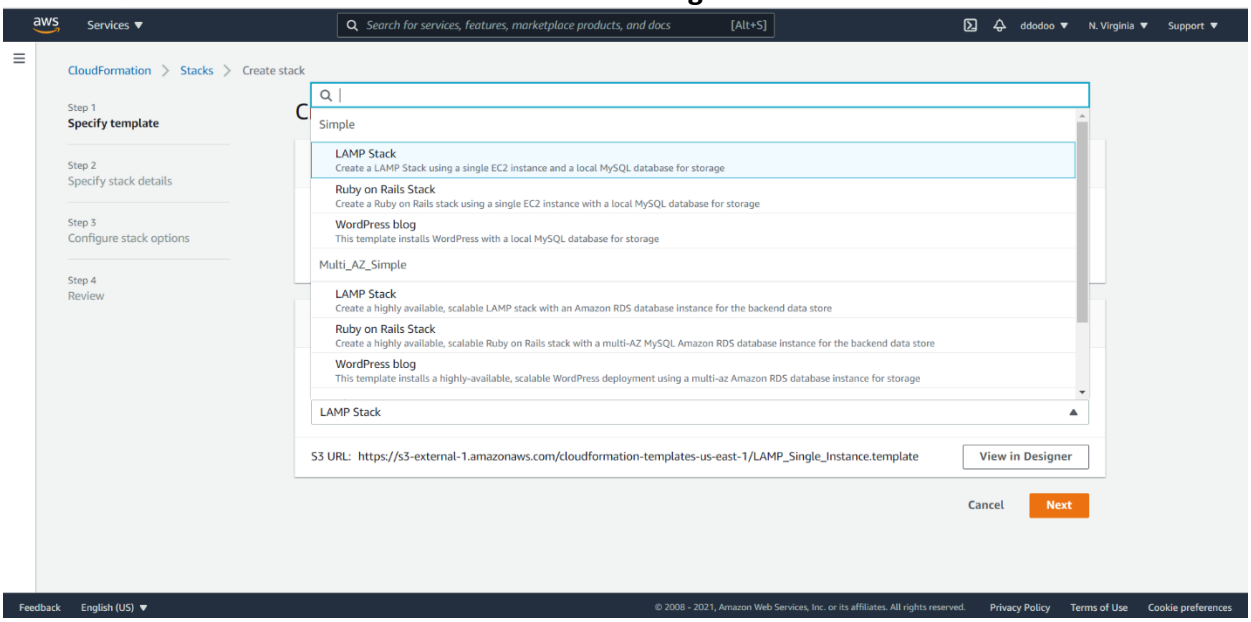
As our final group project of the first batch of the Azubi Africa AWS ReStart program, we were required to migrate and host an on-premises inventory web application onto the AWS Cloud. We sought after the most suitable solution which would improve security and cut down cost while ensuring efficiency through automation.

After days of intensive research and dialogue, we concluded on the use of AWS CloudFormation which is an infrastructure as code service for the provisioning and managing of infrastructure resources needed to host the web application using JSON stack templates.
We selected a LAMP (Amazon Linux, Apache Web Server, MySQL, PHP) stack as the underlying infrastructure resources.

Amazon Linux to serve as the operating system for the Amazon Elastic Cloud Compute (EC2), Apache Web Server to host the web application, MySQL to store the database of the application and PHP is the programming language for the web application.

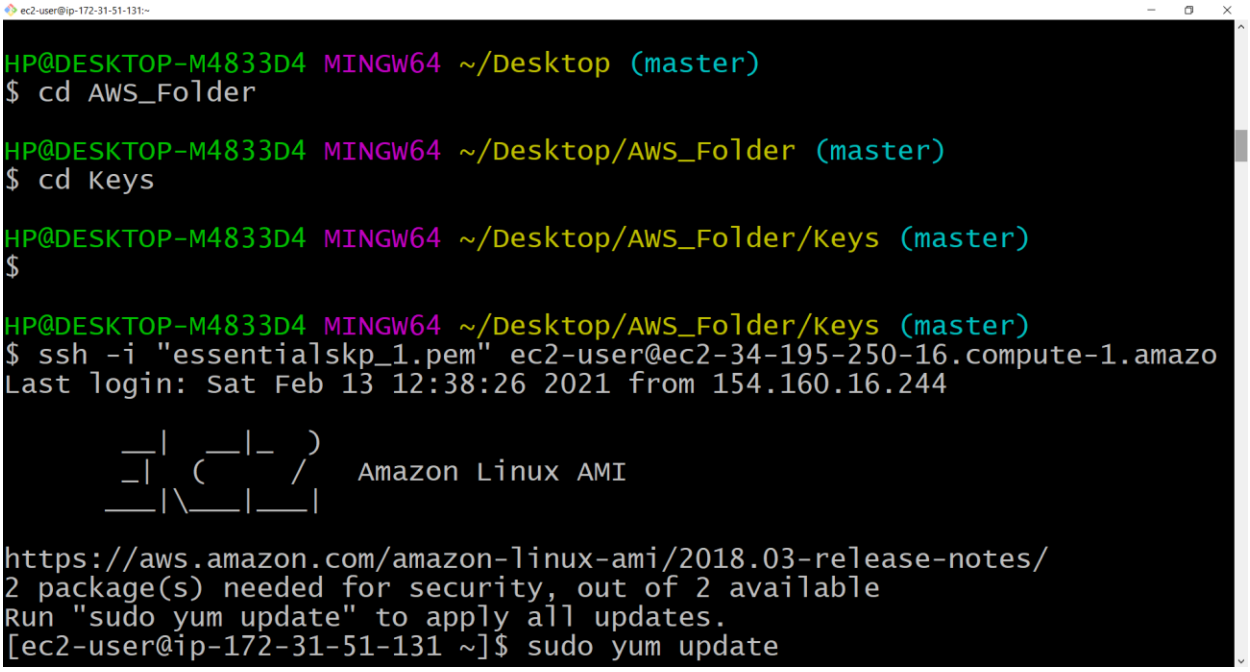
The group first and foremost selected the template with the appropriate versions needed to successfully migrate and host the Inventory Web Application.

Selected CloudFormation LAMP Stack in AWS Management Console



We then went ahead to migrate the web application from on-premises onto the AWS Cloud using the Git bash terminal to remotely connect with the Amazon EC2 instance for configuration, management and provisioning of our resources over an SSH connection.

Connected to Amazon EC2 Instance via SSH connection



The group as well wrote bash script commands which cloned the Inventory web application contents from the local machine and migrated them onto an Amazon EC2 instance.

Hosted Inventory Web Application on Amazon EC2 Instance