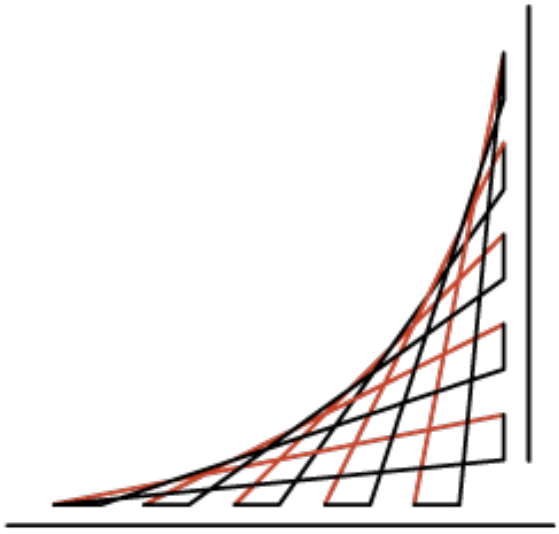

ESCUELA COLOMBIANA DE INGENIERÍA
JULIO GARAVITO

VIGILADA MINEDUCACIÓN

SYSTEMS ENGINEERING

Arquitecturas Empresariales

Workshop 7

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Contents

1 Introducction

The workshop consists of creating a small web application using the Spark java micro-framework (http://sparkjava.com/). Once we have this application we will proceed to build a container for docker for the application and we will deploy and configure them on our local machine. Then we will close a repository on DockerHub and upload the image to the repository. Finally, we will create a virtual machine on AWS, install Docker, and deploy the container we just created.

2 AWS Educate

AWS Educate is an Amazon global initiative that aims to provide students with comprehensive resources to develop cloud skills. It is a no-cost program that provides access to AWS content, training, itineraries, and services.

Image1: AWS

3 Docker

Docker makes development efficient and predictable Docker eliminates mundane and repetitive configuration tasks and is used throughout the development lifecycle for fast, easy, and portable application development - desktop and cloud. Docker's comprehensive platform includes UI, CLI, API, and security that are designed to work

together across the entire application delivery lifecycle.

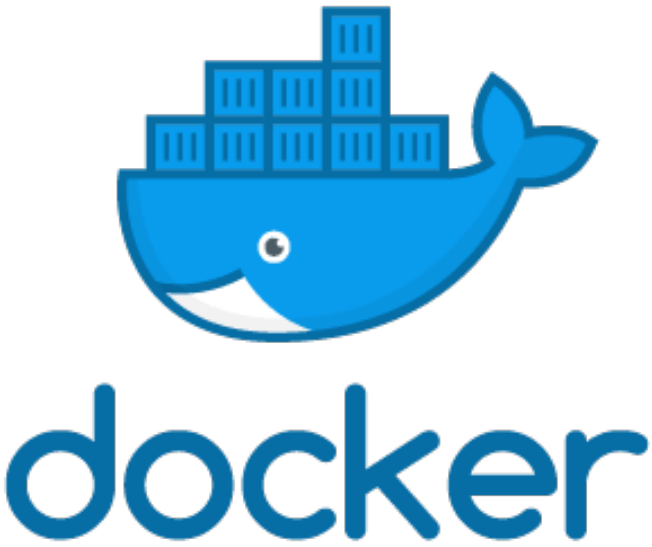

Image2: Docker

4 Workshop

Develop a secure web application with the following requirements:

Create a web service in Spark that converts from degrees Fahrenheit to degrees Celcius. The service must respond to a JSON. Deploy the service on an AWS EC2 machine and publish it. Create a route in the getway API to access the service. Be careful, the integration is not with lambda function. Create a JS application to use the service. Deploy the application to S3. Make sure it is available over the internet. Test the Web application Submit the code developed on Github, a test report, and a video with the experiment running. Try that the service in EC2 is not accessible over the internet, it should only be accessible through the API gateway.

5 Answer

A login was created where it is handled safely and you can exercise your credentials and user safely there, identity classes were created with user details, as well as a url reader was created to read the url and its respective spark web.

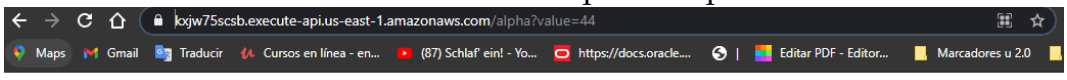

Image3:Executed

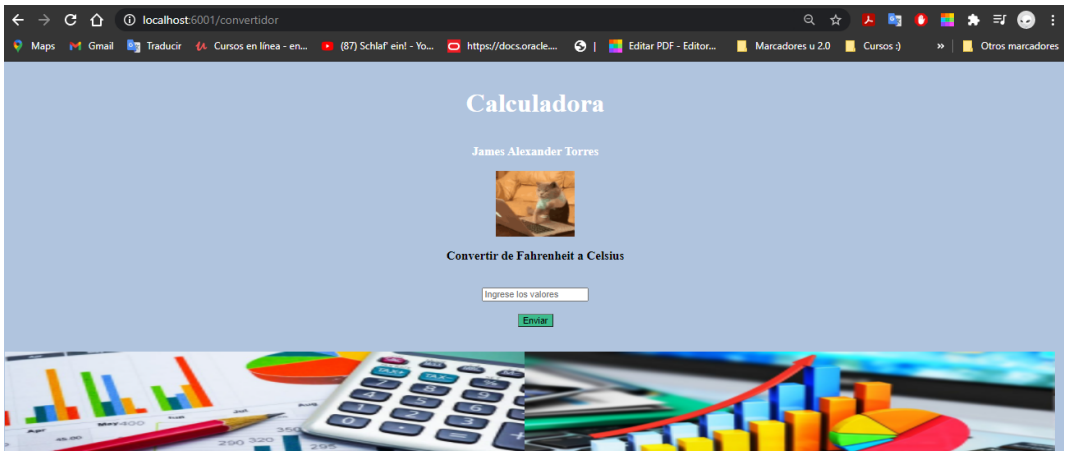

Image3:Executed

6 References

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https://docs.docker.com/docker-for-windows/docker-toolbox/