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Containers on Elastic Beanstalk

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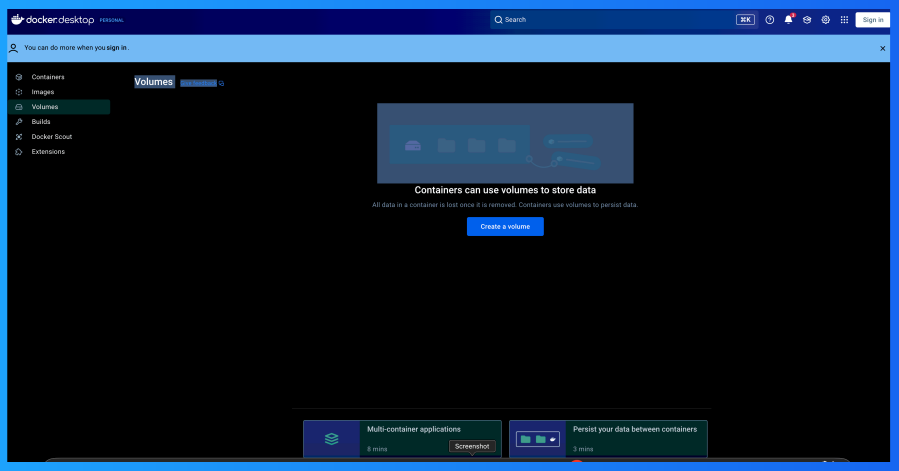

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Introducing Today's Project!

What is Docker?

Docker: A Platform for Building, Shipping, and Running Applications in Containers. Docker is a service allows us to create/run container files.

One thing I didn't expect...

I did not expect to see how well Elastic Beanstalk handles so much and so well. It operates in a seamless fashion.

This project took me...

It took me about 2 hrs to complete this project.

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Understanding Containers and Docker

Containers

Containers are tools for packaging applications in a way that's easy for other developers to run.They're useful because it helps developer working together to share their work in a more efficient way.

A container image is a template used to create containers. This image has the intructions which help run the application in a containeized fashion.

Docker

Docker is a platform for creating and managing containers. Docker makes working with containers easy. Docker desktop is a software that makes using Docker easier.

Docker deamon is the engine for Docker that recieves commands we send throught clients e.g clients in the Docker Desktop.

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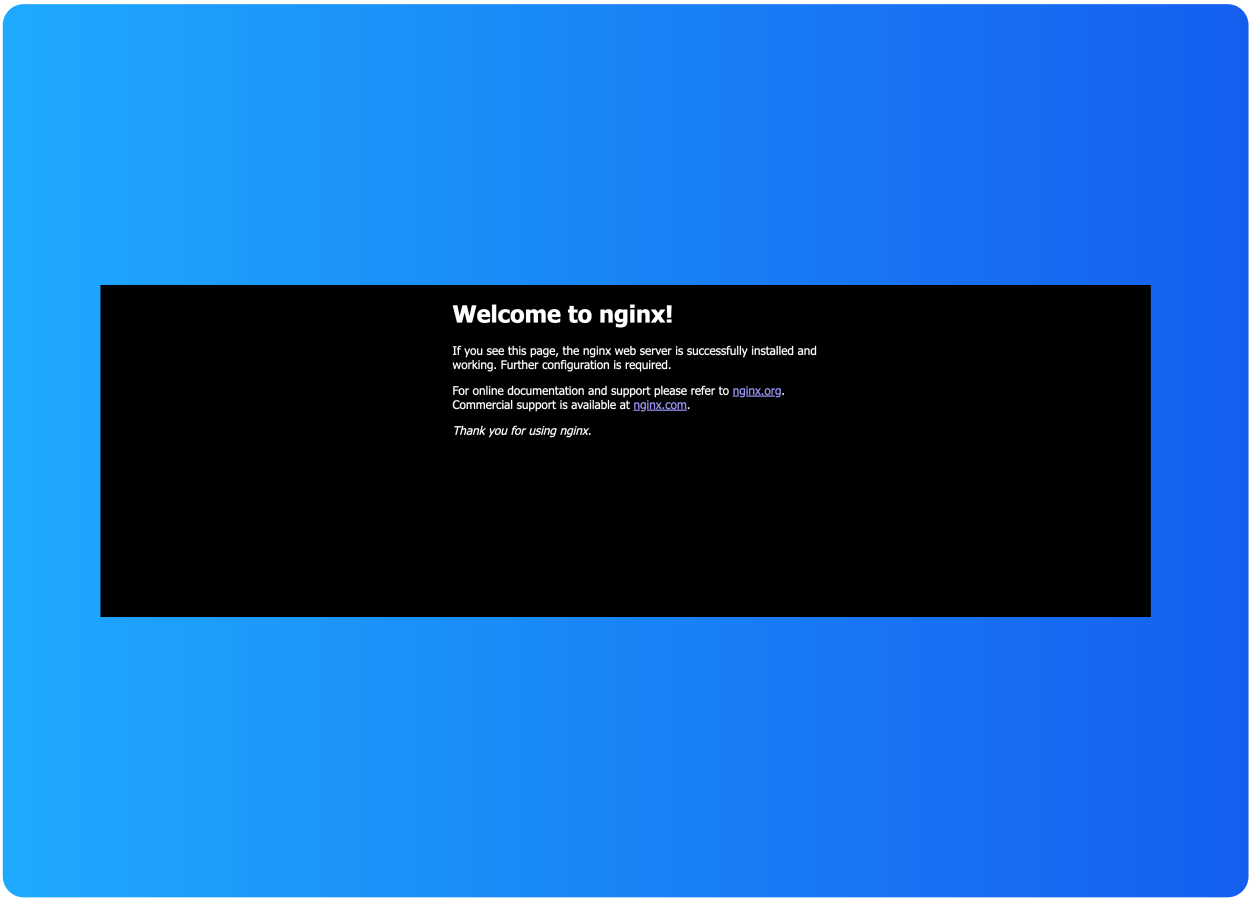
Running an Nginx Image

Nginx is a server known as a proxy server. It allows for traffic to be ditributed across the nextwork prior to reaching its final destination. It has capabilities to be a reverse proxy server and a load balancers.

The command I ran to start a new container was docker run(docker run -d -p 80:80 nginx). Which means we are running the container in the backgroud.



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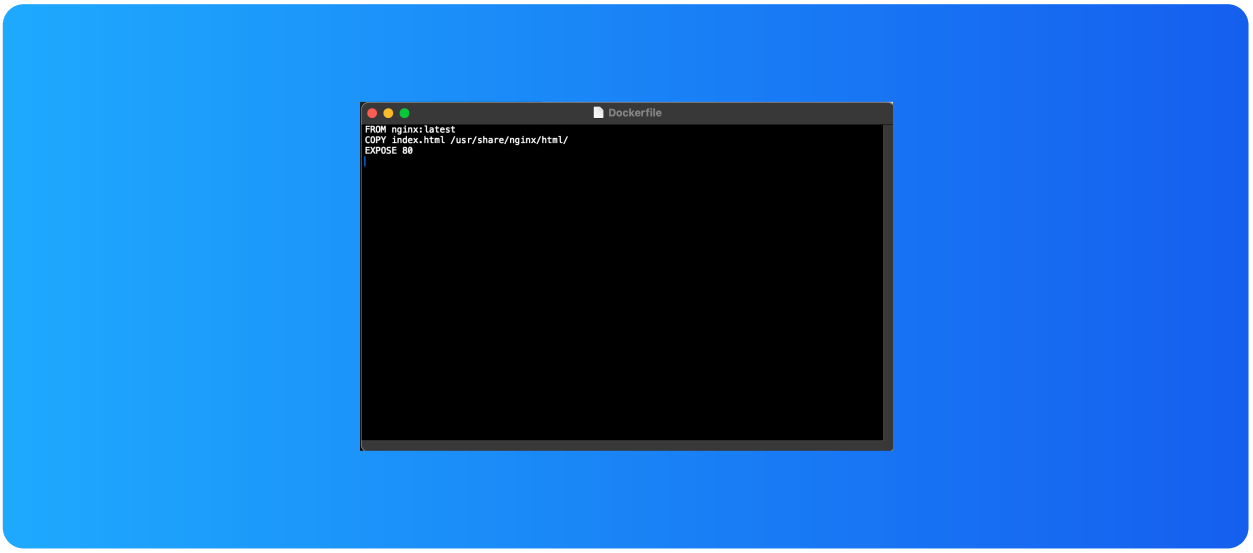
Creating a Custom Image

The Docker file is a set of instructions that tells Docker how to build a custom container image.

Our Docker file tells Docker 3 things.First, our custom container image uses the latest. version of the Nginx container image at its base.Then we're making modifying this base by replacing the default Nginx welcome page with our own custom index.html

The command I used to build a custom image with my `Dockerfile was docker build .The '.' at the end of the command means Docker can find the Docker file in the current directory i.e the Compute folder in our desktop.



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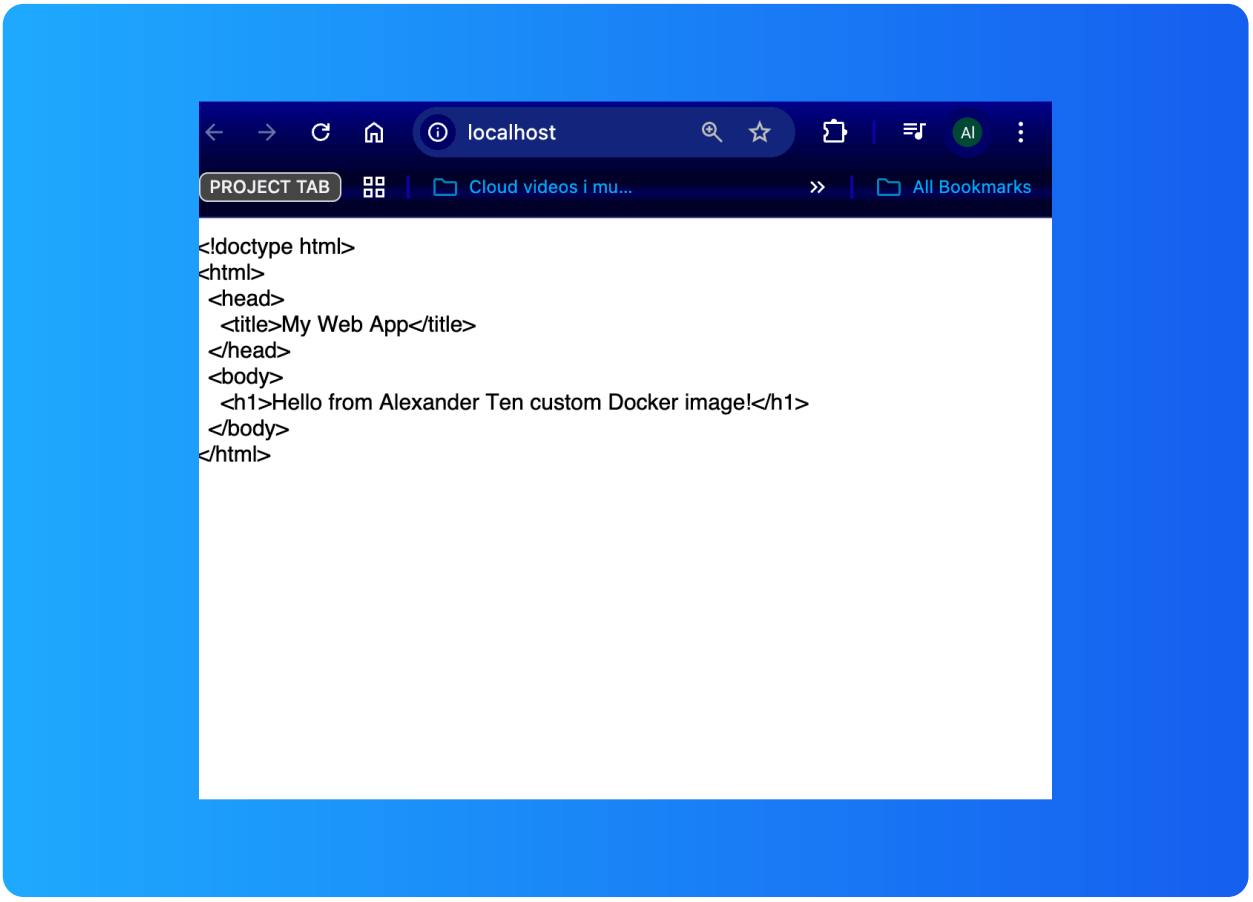
Running My Custom Image

There was an error when I ran my custom image because we tried to map our port 80 with the container's port 80, but a running container was already using port 80. I resolved this by stopping the running container so that we can start our new one.

In this example, the container image is the set of instructions you would need to run the container. The container is where to image is going to run. Docker will create the container once the image is created.



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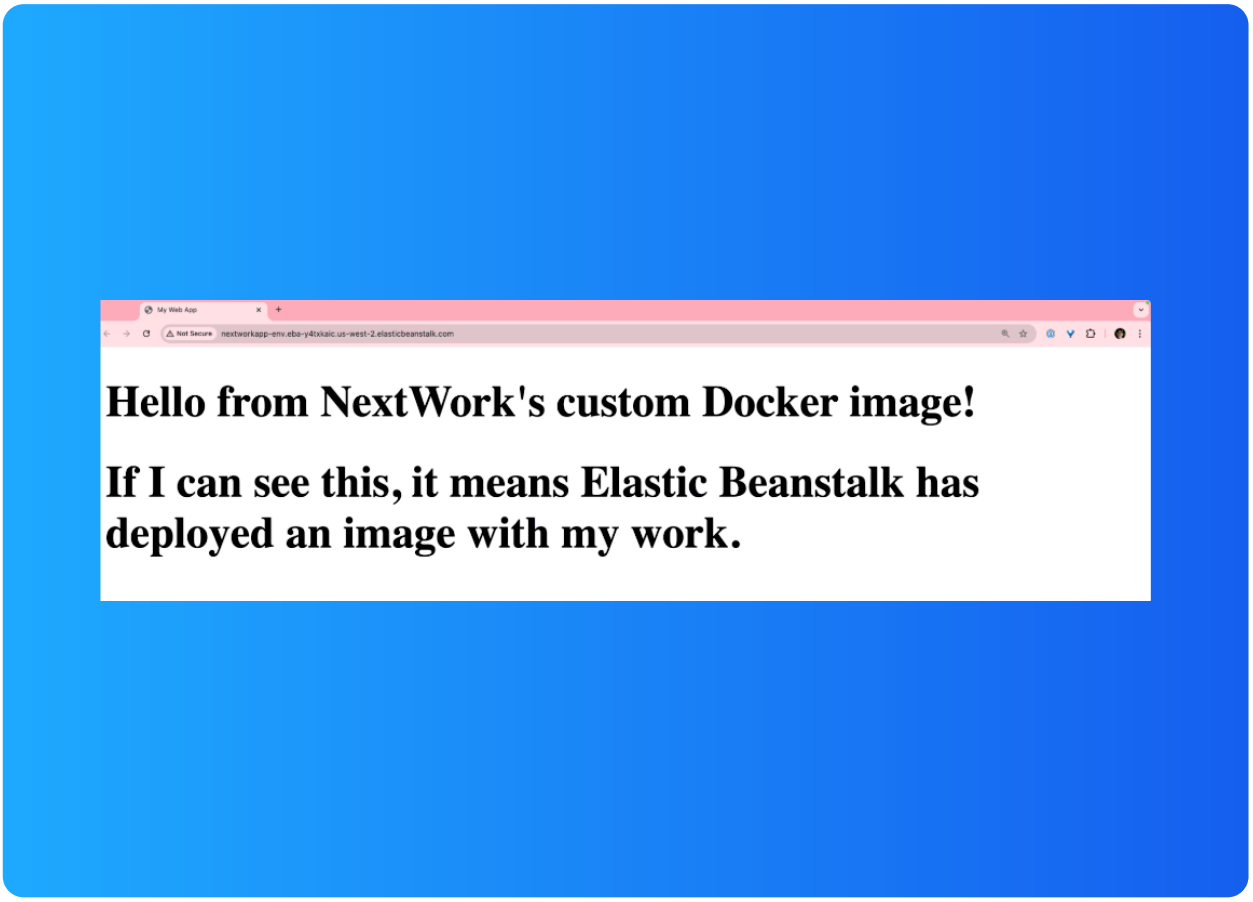
Elastic Beanstalk

Elastic Beanstalk is an AWS service that allows us to run applications with minimal effort. It allows us to deploy our packages easily.

To deploy the image file to my container then to the cloud it took me about 20 mins. I had to fix the error of not finding my ec2 instacne profile while configuring my Elastic Beanstalk. Fixed the error by creating the proper role.



Everyone should be in a job they love.

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