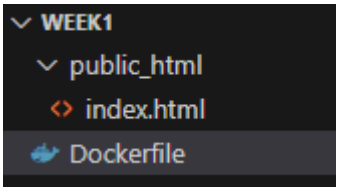
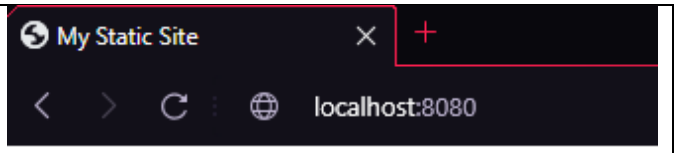
<table>
<tr><td colspan="2">Lab Logbook

Student ID Alex Garcia Date 24/10/24</td></tr>
<tr><td>Briefly introduce the aim of this lab</td><td>This lab aims to explore using docker as part of securing cloud virtualisation solutions and use it as our first mode of deployment in the cloud.</td></tr>
<tr><td>Identify the tools used for each task and why it was required.</td><td>For the first part of the lab, I had to use visual studio code for the development environment and install docker desktop application on my computer to run the application image.

The commands I used for building the image and running the image in VS:
- docker build -t my-web-app .
- docker run -d -p 8080:80 my-web-app

For the second part of the lab, I had to create an AWS application to then push the docker container to ECS. I had to download AWS CLI to connect from my deployment environment to the AWS servers.</td></tr>
<tr><td>What are your observations from each task?</td><td>My observation from each task was that there are a lot of commands to input to make the web application work and a lot of settings must be manually configured to ensure it is fully functional.</td></tr>
<tr><td>Report your lab experimental result for each task</td><td>File tree for the first section of the lab
 

Website application running on localhost:8080</td></tr>
</table>



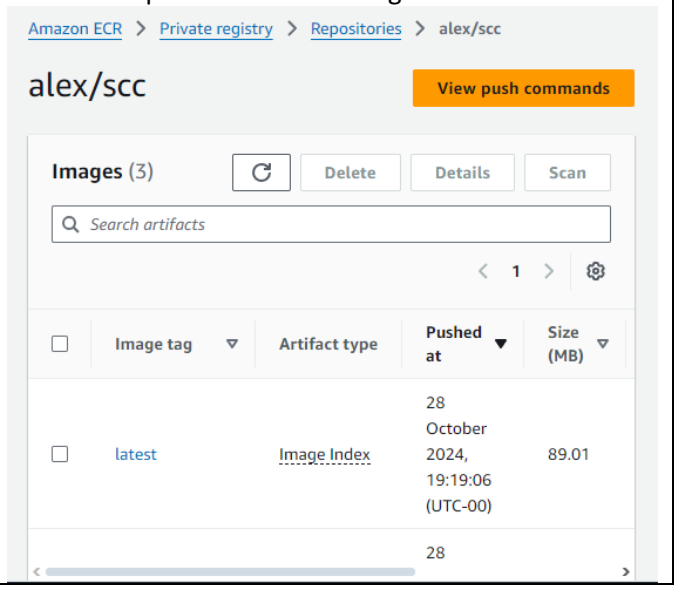
Hello World!

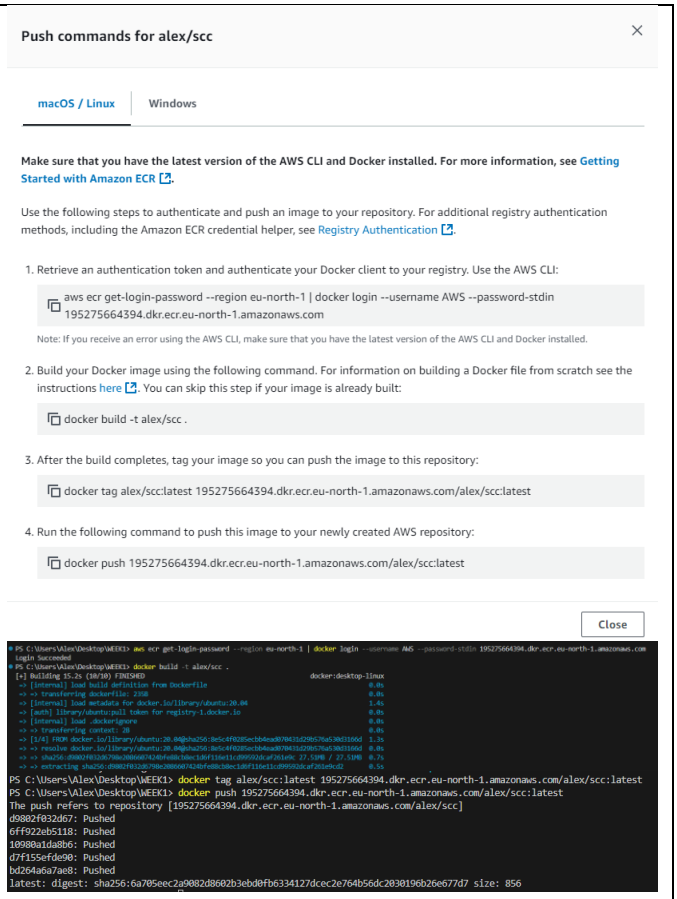
Hi there - This is a simple static website!

```
PS C:\Users\Alex\Desktop\WEEK1> aws configure
AWS Access Key ID [None]: AKIAS252WFQFEYY4PPXF
AWS Secret Access Key [None]: 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
Default region name [None]: us-east-1
Default output format [None]: json
```

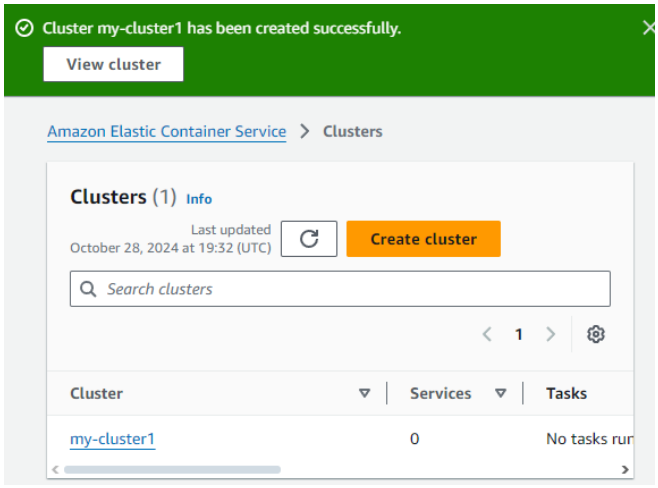
I made sure to download the AWS CLI to work with it in the VS Code terminal to connect to my AWS account and push the docker image there.

After creating a directory, I then did commands to push the docker image to AWS.

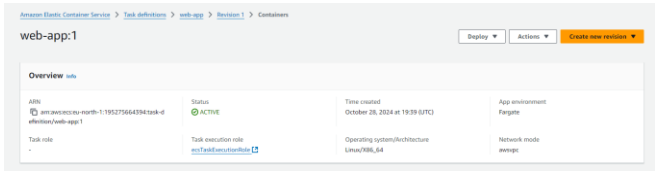




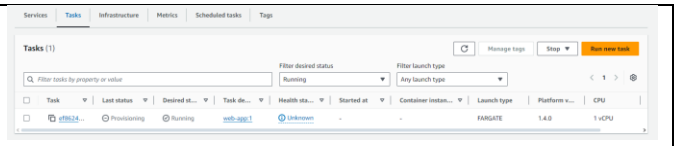
I then created an ECS Cluster to deploy the docker image.



I then created a task definition and added a container.



I then ran a new task which allowed me to deploy the docker image.

	
What was your takeaway from the tasks	What I learnt from the tasks is how to create a simple web application in a development environment using docker and using AWS as a deployment service. I also learnt how to create clusters and run tasks to deploy the web application in AWS and before that push the docker image to AWS through push commands.