

CS3219 Task A1

Student details

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Github repository

The repository can be found at <https://github.com/C-likethis123/CS3219>, in the folder 'Task_A1'

Instructions on how to run

Prerequisites

Install Docker.

Instructions

To build the Docker image: `docker build -t cs3219_a1 .`

To run the image: `docker run -dp 8080:8080 cs3219_a1.`

This starts a web server at localhost:8080.

Navigate to localhost:8080 and the following will be shown:

CS3219 Task A1

A static web page for CS3219!

To stop the docker container, run `docker ps` to retrieve the container ID, then run `docker stop <container id>`

Relevant Learnings and Solution writeup

Docker

A Docker container image is a standalone executable that can run an application.

For this task, I have chosen to extend the [NGINX Docker image](#) in a Dockerfile and expose port 8080.

Relevant resources that I referred to:

- [NGINX Docker Image](#)
- [Dockerfile Reference](#)

Nginx

Nginx is an open source reverse proxy server for protocols such as HTTP and HTTPS, and allows developers to build up load balancers and web servers.

For this solution I have a server at localhost:3000 which serves a static HTML file, as well as a proxy server at localhost:8080 which proxies requests to localhost:3000. More details can be found in the file [nginx.conf](#).

Relevant resources that I referred to:

- [How to Configure a Nginx HTTPs Reverse Proxy on Ubuntu Bionic](#)
- [NGINX Reverse Proxy](#)
- [NGINX](#)