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CS3219 Task A1

Student details

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Github repository

The repository can be found at https://github.com/C-likethis123/CS3219_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:

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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.

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

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.