

Name Surname

Matriculation Number  
email

Game of dockers

Documentation

**Declaration**

I declare, except where explicit reference is made to the contribution of others\*, that this assignment is the result of my own work and has not been submitted for any module or programme degree at the Edinburgh Napier University or any other institution. This is in accordance with Edinburgh Napier University’s Academic Integrity Regulations.

\*IMPORTANT: Contribution of others may include use of Artificial Intelligence (AI) tools (details of which can be found in the Guidelines for Students on AI & Writing Assistant Tools). Please declare here whether you have used such tools, and to what extent:

NO I have not used such tools

YES I have used such tools and I have provided details below and included sample prompts and responses in an appendix.

If you answered YES here, please, in around 100 words, describe how (and at which points) you have used such tools to support your completion of this assessment.

1. Coursework Planning

Here you can describe how you worked on your coursework and the timeline of your activities.

19/10/23: I divided the coursework specification into three distinct tasks to increase comprehension. Also I downloaded the provided zip file from Moodle and transferred it to the linux VM via email. I then established three docker containers, namely “docker1”, “docker2”, and “docker3”. Placing the corresponding folders from the zip file into each respective container.

21/10/23: I initiated the “mainscript.sh” script and incorporated a round-robin loop to gather two text files at a time. Encountering difficulties in pulling text files from the Docker directory, I temporarily resorted to copying directories at the script's outset and deleting them at the end. The script produced the output in the "GAME\_OF\_DOCKERS.txt" file.

14/11/23: I created a terminal command to sort a directory based on size. Then formulated some functions to seamlessly integrate into my code for improved structure.

15/11/23 (morning): I resolved my docker issue I had on the 21st, enabling the retrieval of files from the containers. This marked the completion of “task 1”. Using the momentum I went ahead and started the implementation of “task 2”. I utilized the “ls -Sr” command to sort text files within each directory and assigned them to a “files” variable. An if statement was then implemented to use “-Sr” only when in “docker1” and “docker” as specified. The script was renamed from “mainscript” to “compileFiles” as I realised that I wanted a script to call this specific file. To finish of the morning I captured a snapshot.

15/11/23(evening): Starting “task3” I created a new script called “Main”. Initially, It only started the docker containers which already contained the loaded folders in each Docker. However after rereading the coursework specification, I was changed to also fully create the docker containers, load the folders into each docker container, then removed the containers after the script is finished with them. Post-loading, the script then invoked my “compileFiles” script to generate the “GAME\_OF\_DOCKERS” text file. Further functionality were added to the Main script,, including a terminal user interface for reading, deleting, or appending text to the file. The program offered an option to exit, else it reran the last three commands. Another snapshot was taken

16/11/23: I enhanced the user interface by adding error exception handling. Extensive comments were added to both scripts for clarity. The Main script autonomously created and deleted Docker files. Minor adjustments were made to ensure submission readiness, and the entire project was zipped and sent out of the VM.

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1. Implementation Details

Here you can talk about your implementation and possible tricks or arrangements that you made (e.g. usage of an extra library), which might not be communicated through your comments .

My simplified document I made to understand the coursework  
A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated