# Docker Lab 3 David Williams Cybersecurity & IT security

# 4th year C00263768

## What is docker:

Docker is a software that is used by developers and people who want to package their applications and necessary dependencies into a unit called a container. These containers run consistently across different environments, making it easier to deploy and manage software.

Installed pic:  
A screenshot of a computer

Description automatically generated

Step 1: cloning the repo

Using Visual Studio Code (VSC) I cloned the repo to my main directory.

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Step 2: create a text file where I will insert the following information to the “Dockerfile.txt” file.

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Step 3: Building the image

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Step 4: start an app container.

Ran into a “docker: Error response from daemon: Ports are not available: exposing port TCP 127.0.0.1:3001 -> 0.0.0.0:0: listen tcp 127.0.0.1:3001: bind: An attempt was made to access a socket in a way forbidden by its access permissions.” issue but managed to fix it with a windows powershell commands

“  
net stop winnat

net start winnat

“



Step 5: Running the website.

Here is the container running.A screenshot of a computer

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here is the website

A screenshot of a computer

Description automatically generated

Changes made to the file:  
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Step 6: Ubuntu

A computer screen with green text

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Getting the randomly generated number between 1 and 10000



List of the root files within the Ubuntu container



Created the todo db

and created the container



Items included are still there

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Inspecting the todo db  
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part 7: Bash and Ubuntu

run command to enter into bash mode in Ubuntu container.



Directory and commands to show I created myfile.txt

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part 8: multi container apps

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Installing through PowerShell.

MySQL Database:

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Installing the nicolaka/netshoot image

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A screenshot of a computer screen

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another container install

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