

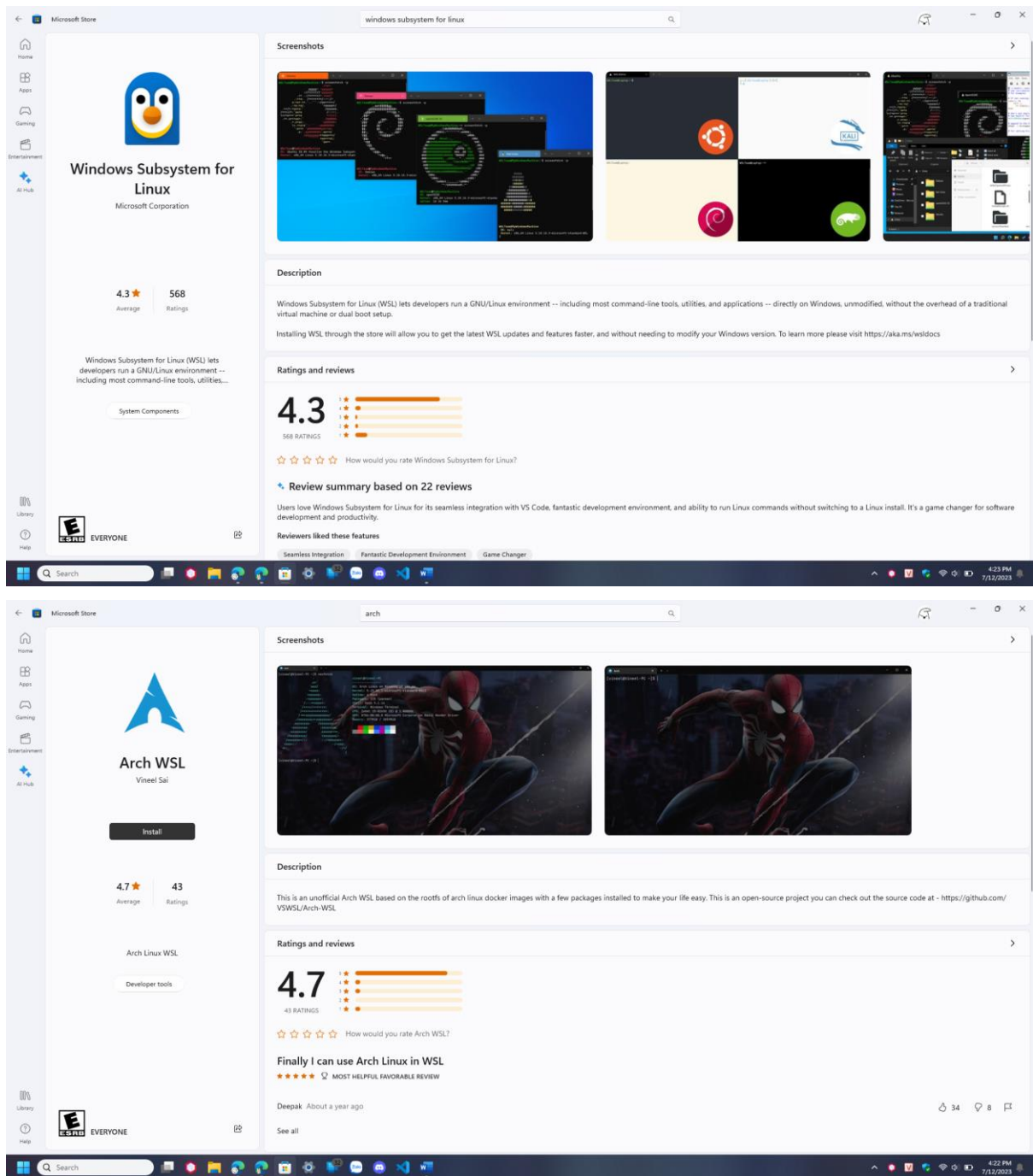
# INSTALLATION INSTRUCTIONS

## Group 12

### I. Install WSL and Arch WSL from the Microsoft Store

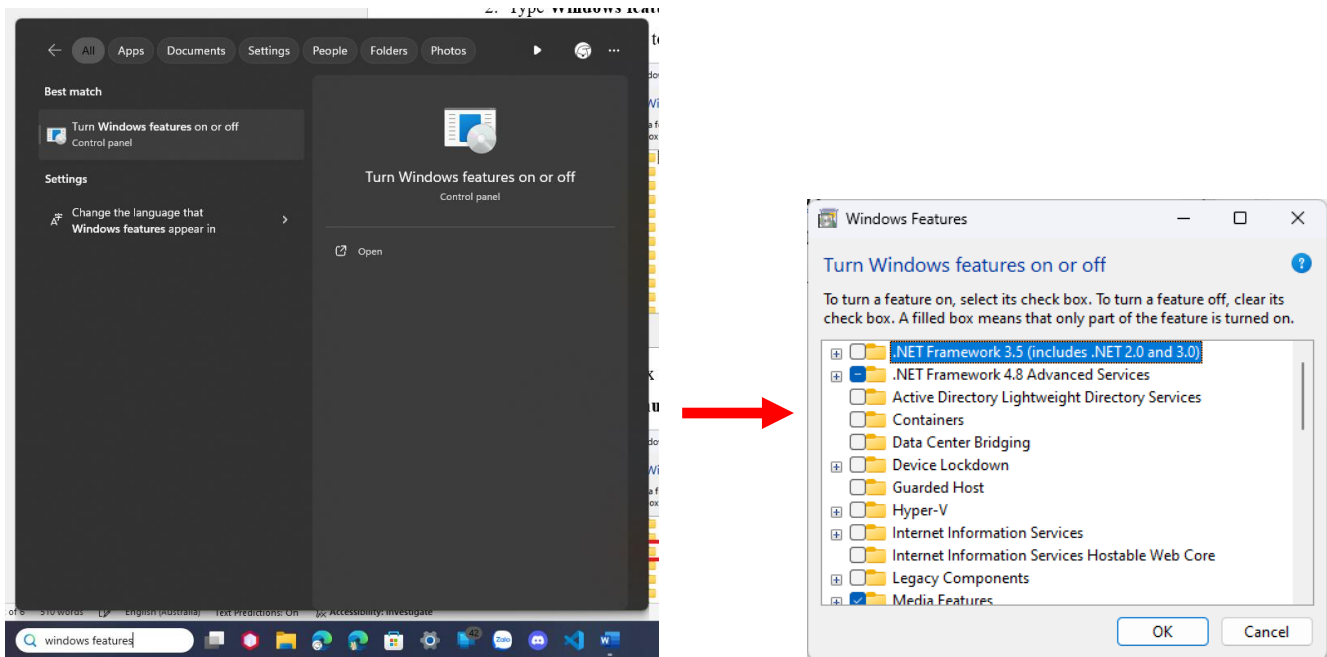
[Link to WSL](#)

[Link to Arch WSL](#)

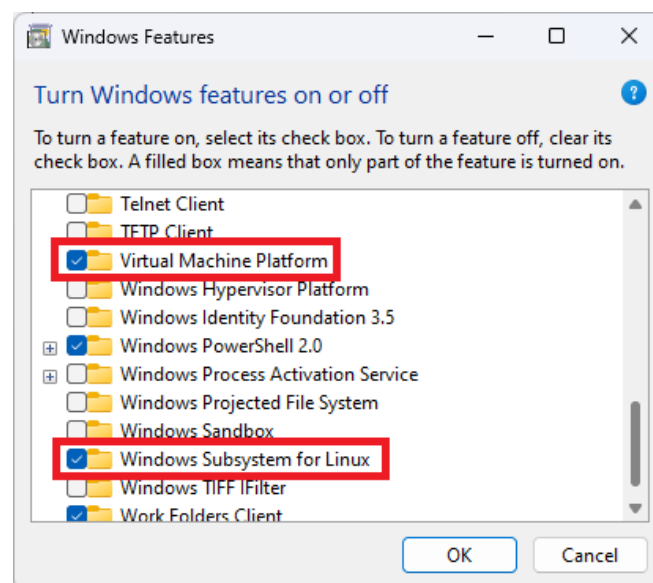


- Click on **Install** to download and install the application.
- Once installed, we need to enable some Windows features for WSL to work as follows:

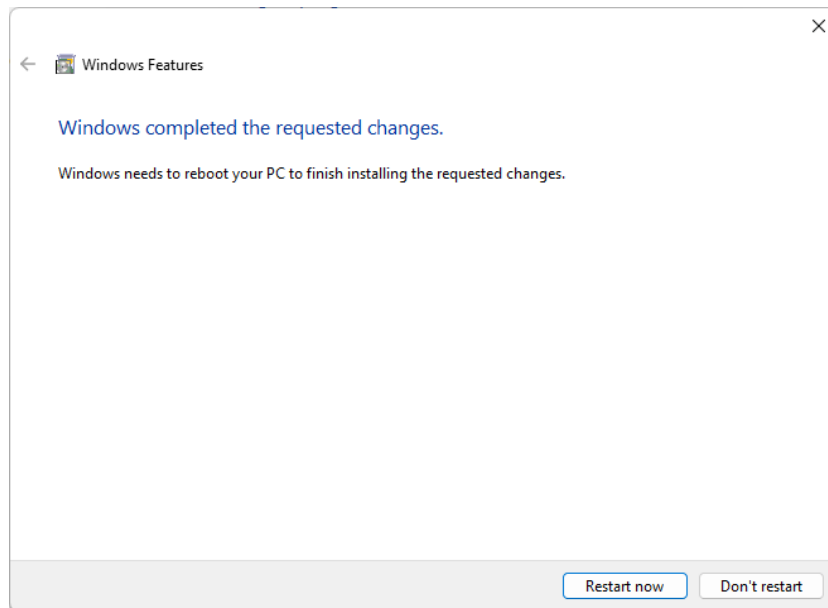
1. Press **Win + S** at the same time to launch the search box.
2. Type **Windows features** in the search box then click on **Turn Windows Features on or off** to open the window in the screenshot directly below.



3. Select the checkbox next to **Virtual Machine Platform** and **Windows Subsystem for Linux** then click on **OK**



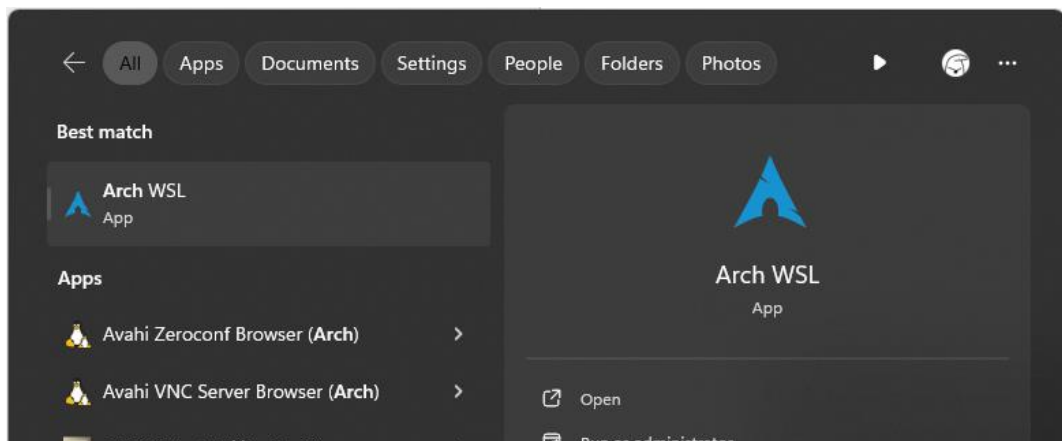
4. A Windows Feature wizard will then open and ask you to restart the platform. Click the **Restart Now** option on that window.



5. Once your machine has finished rebooting, you're now ready to begin using Arch on WSL

## II. Set up Arch WSL

- Launch the search box, type **Arch** then click on **Arch WSL**



- Once it has finished its initial setup, you will need to create a username and password (this does not need to match your Windows user credentials).

```
Arch
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: |
```

- It's always good practice to install the latest updates with the following commands, **entering your password when prompted** :

```
sudo pacman -Syu
```

Enter **Y** when prompted whether to proceed with the installation.

```
ducanh@imlida:~
core/gnutls             3.8.1-2      3.8.2-1      0.02 MiB    2.76 MiB
core/gpgme              1.23.1-1     1.23.2-1     0.00 MiB    0.47 MiB
core/hwdata              0.375-2      0.376-1      0.03 MiB    1.57 MiB
core/iana-etc            20231018-1   20231117-1   0.00 MiB    0.39 MiB
core/iproute2            6.5.0-1      6.6.0-2     -0.04 MiB    1.09 MiB
core/iptables            1:1.8.9-1    1:1.8.10-1   0.00 MiB    0.43 MiB
core/libcap               2.69-1        2.69-3     -0.06 MiB    0.68 MiB
core/libelf              0.189-3      0.190-1      0.04 MiB    0.54 MiB
core/libgcrypt            1.10.2-1     1.10.3-1     0.00 MiB    0.58 MiB
core/libksba              1.6.4-1      1.6.5-1      0.00 MiB    0.14 MiB
core/libnl                3.8.0-1      3.9.0-1      0.00 MiB    0.41 MiB
core/libnl1-kit           0.25.2-1     0.25.3-1     0.00 MiB    0.50 MiB
core/libxml2              2.11.5-1     2.12.2-1     0.01 MiB    0.82 MiB
core/p11-kit              0.25.2-1     0.25.3-1     0.00 MiB    0.23 MiB
core/perl                 5.38.0-1     5.38.1-1     -0.03 MiB   20.23 MiB
core/pkgconf              1.8.1-1      2.1.0-2      0.01 MiB    0.06 MiB
core/readline             8.2.001-2    8.2.007-1    0.00 MiB    0.32 MiB
core/sqlite               3.44.0-1     3.44.2-2     0.07 MiB    1.63 MiB
core/sudo                 1.9.14.p3-1  1.9.15.p2-1  0.31 MiB    1.88 MiB
core/systemd              254.5-1      254.6-2      0.11 MiB    7.69 MiB
core/systemd-lib           254.5-1      254.6-2      0.01 MiB    1.06 MiB
core/systemd-sysvcompat    254.5-1      254.6-2      0.00 MiB    0.01 MiB
core/texinfo              7.1-1        7.1-2        0.00 MiB    1.68 MiB
core/util-linux           2.39.2-1     2.39.3-1     0.67 MiB    2.77 MiB
core/util-linux-lib       2.39.2-1     2.39.3-1     0.00 MiB    0.44 MiB
extra/vim                 9.0.2070-1   9.0.2143-1   0.01 MiB    2.18 MiB
extra/vim-runtime         9.0.2070-1   9.0.2143-1   0.06 MiB    6.89 MiB
core/xz                   5.4.4-1      5.4.5-1      0.00 MiB    0.60 MiB

Total Download Size:   73.36 MiB
Total Installed Size: 293.42 MiB
Net Upgrade Size:       2.33 MiB

:: Proceed with installation? [Y/n] |
```

- Now we will install some packages (so that our program can run) with following commands, **entering your password when prompted**.

## Install git

- To **Ensure** a git installation exists, enter the following command:

```
sudo pacman -S git
```

## III. Clone our project from Github

- **Make sure** your current working directory is the home directory by typing `cd` then press **Enter**

- Clone our project and switch to it

```
git clone https://github.com/Harito97/DynamicMaze.git
```

- Once done, switch to the cloned directory

```
cd DynamicMaze
```

- Install the necessary packages with the following command:

```
sudo chmod +x requirements.sh
```

```
./requirements.sh
```

### **NOTE THAT:**

- Enter your password when prompted.
- Accept the default number of packages by pressing **Enter**.
- Enter **Y** when prompted whether to proceed with the installation.

## You are finally ready to run our project!

- Switch to the **backend** folder

```
cd backend
```

- We have already compiled the program, so you can simply run it with the following command:

```
sudo chmod +x Main
```

```
./Main
```

- Open another terminal of Arch WSL (Launch the search box, type Arch then click on Arch WSL).
- Switch to the **frontend** folder

```
cd DynamicMaze/frontend
```

- Once you're inside the **frontend** folder, run the following command to install the dependencies required for the project:

```
npm i
```

- In case of issues shown after the npm install, run the below to automatically fix the issues:

```
npm audit fix
```

- Start the development server:

```
npm start
```

- This command will start a local development server and run the React project in your web browser. You can access the project by navigating to **http://localhost:3000** in your web browser.

