1. Install Docker

Windows

Step 1: Prepare Your Computer

- 1. Open **Task Manager** (Ctrl + Shift + Esc).
- 2. Go to the **Performance** tab.
- 3. Check if **Virtualization** is enabled. If not:
 - o Restart your computer.
 - o Enter the BIOS/UEFI settings (press a key like F2, F10, or Del while booting).
 - Enable Virtualization Technology (VT-x) or AMD-V.

Step 2: Install Docker Desktop

- 1. Go to Docker's website and download **Docker Desktop for Windows**.
- 2. Double-click the downloaded file to start the installation.
- 3. Follow the steps in the installer:
 - o Accept the terms.
 - o Choose to enable **WSL2** instead of Hyper-V (if prompted).
 - o Click Install and wait.

Step 3: Start Docker

- 1. Open **Docker Desktop** (search for it in the Start menu).
- Sign in with your Docker Hub account (create one at <u>hub.docker.com</u> if you don't have one).

Step 4: Verify Docker is Working

- 1. Open PowerShell (right-click, select Run as Administrator).
- 2. Type this command:

```
docker --version
```

3. You should see the Docker version number. If yes, Docker is installed and running!

Mac

Step 1: Install Docker Desktop

- 1. Go to Docker's website.
- 2. Download Docker Desktop for Mac.
- 3. Open the downloaded .dmg file.
- 4. Drag the **Docker** icon into the **Applications** folder.

Step 2: Start Docker

- 1. Open **Applications** and double-click the **Docker** icon.
- 2. Docker will start running in the background. Look for the whale icon in the top-right menu bar.

Step 3: Verify Docker is Working

- 1. Open **Terminal** (search for it in Spotlight using Cmd + Space).
- 2. Type:

```
docker --version
```

3. You'll see the Docker version number. If yes, Docker is ready!

Linux/Ubuntu

Step 1: Install Docker

- 1. Open Terminal.
- 2. Update your system:

```
sudo apt update && sudo apt upgrade -y
```

3. Install required tools:

sudo apt install apt-transport-https ca-certificates curl
software-properties-common -y

4. Add Docker's GPG key:

curl -fsSL https://download.docker.com/linux/ubuntu/gpg |
sudo gpg --dearmor -o /usr/share/keyrings/docker-archivekeyring.gpg

5. Add Docker's repository:

echo "deb [arch=\$(dpkg --print-architecture) signedby=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu \$(lsb_release cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

6. Install Docker:

sudo apt update
sudo apt install docker-ce docker-ce-cli containerd.io -y

Step 2: Start Docker

1. Start the Docker service:

sudo systemctl start docker

2. Enable it to run on startup:

sudo systemctl enable docker

Step 3: Verify Docker is Working

1. Check the version:

docker --version

2. You'll see the Docker version number if it's running properly.

Create a free account in Docker Hub

Step 1: Open the Docker Hub Website

- 1. Open your web browser (like Chrome, Firefox, or Edge).
- 2. Type https://hub.docker.com into the address bar and press Enter.

Step 2: Go to the Sign-Up Page

- 1. Once the Docker Hub homepage loads, look for a button that says **Sign Up** (usually at the top-right corner).
- 2. Click on the **Sign Up** button.

Step 3: Fill in the Registration Form

You will see a form with fields to enter your details. Fill them out as follows:

1. Username:

- Choose a unique username for your Docker account (e.g., "MyDocker123").
- The username is how others might find you on Docker Hub, so pick something simple and easy to remember.

2. Email Address:

• Enter a valid email address that you use frequently (e.g., myemail@example.com).

3. Password:

- Create a strong password. It should have a mix of letters, numbers, and symbols (e.g., "Docker@1234").
- Write down or save your password somewhere safe.

4. Optional (Verify Username Availability):

• Sometimes, if the username is already taken, you might see a message asking you to pick a different one. Adjust your username until it's accepted.

Step 4: Accept the Terms

1. Look for a checkbox that says something like "I agree to the Terms and Conditions."

2. Read the terms if you wish, then tick the checkbox to agree.

Step 5: Complete the CAPTCHA

- 1. A CAPTCHA might appear asking you to verify that you're not a robot.
- 2. Follow the instructions (e.g., selecting images or typing letters/numbers) to complete the verification.

Step 6: Click Sign Up

1. After filling in all the fields and completing the CAPTCHA, click the **Sign Up** button.

Step 7: Verify Your Email Address

- 1. Open your email inbox (the one you used for registration).
- 2. Look for an email from **Docker Hub** with a subject like "Verify Your Email."
- 3. Open the email and click on the verification link inside.
 - If you don't see the email, check your **Spam** or **Promotions** folder.

Step 8: Log In to Docker Hub

- 1. After verifying your email, return to the Docker Hub website.
- 2. Click on **Log In** (usually at the top-right corner).
- 3. Enter your username (or email) and password.
- 4. Click **Log In** to access your account.