Installation and Setup Guide Docker
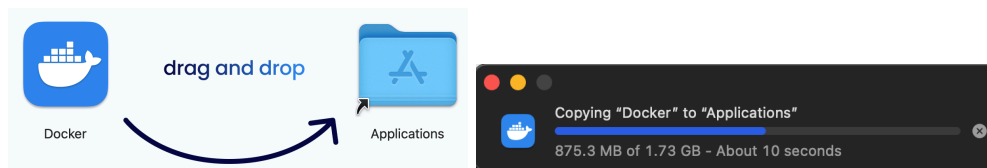
1. **System Requirements**
   - macOS Version: Ensure your macOS is version 10.14 (Mojave) or later.
   - Hardware: At least 4 GB of RAM.
   - Virtualization: Ensure that virtualization is enabled.
   - If not met we need to download Docker Toolbox

2. **Download Docker Desktop for Mac**
   - Go to the Docker Hub website: [Docker Desktop for Mac](#)

3. **Install Docker Desktop**
   - Double-click the downloaded `.dmg` file to open it.

4. **Start Docker Desktop**
   - Go to your Applications folder and double-click the Docker icon to launch it.
   - On first launch, Docker Desktop will prompt you to enter your system password to install its networking components and adjust system settings.
   - Docker will then start running in the background. You can see the Docker whale icon in your menu bar indicating that Docker is active.

5. **Complete Setup**
   - After Docker starts, you may be greeted with a welcome screen or tutorial. Follow any instructions to complete the initial setup.
   - Open a terminal window (you can use the built-in Terminal app) and type the following command to verify Docker is installed correctly:

```
srikanthjosyula@Srikanths-Air ~ % docker --version
Docker version 27.0.3, build 7d4bcd8
srikanthjosyula@Srikanths-Air ~ %
```

6. **Configuration (Optional)**
   - Click the Docker whale icon in the menu bar and select "Preferences" or "settings" to open the Docker Desktop settings. You can adjust resource allocation (CPU, Memory) in the "Resources" tab. Configure network, proxies, and experimental features as needed.

7. **Test Docker Installation**

- To ensure Docker is working, run a simple test container using the following command:
  Open your CLI terminal and start a container by running the docker run command:
    - `$ docker run -d -p 8080:80 docker/welcome-to-docker`
- Docker will pull the hello-world image from Docker Hub and run it. You should see a confirmation message indicating that Docker is set up correctly.

```
srikanthjosyula@Srikanths-Air ~ % docker run -d -p 8080:80 docker/welcome-to-docker
Unable to find image 'docker/welcome-to-docker:latest' locally
latest: Pulling from docker/welcome-to-docker
579b34f0a95b: Pull complete
d11a451e6399: Pull complete
54b19e12c655: Pull complete
1c2214f9937c: Pull complete
1fb28e078240: Pull complete
94be7e780731: Pull complete
b42a2f288f4d: Pull complete
89578ce72c35: Pull complete
Digest: sha256:eedaff45e3c78538087bdd9dc7afafac7e110061bbdd836af4104b10f10ab693
Status: Downloaded newer image for docker/welcome-to-docker:latest
ed6ae2004cefe2efbe914c0b44672283f6113b22bb1c58425a87c022d6d2827b
srikanthjosyula@Srikanths-Air ~ %
```

- For this container, the frontend is accessible on port 8080. To open the website, visit http://localhost:8080 in your browser.