TECHNISCHE UNIVERSITÄT CHEMNITZ

SETUP MANUAL
PLANSPIEL WS 2019/2020

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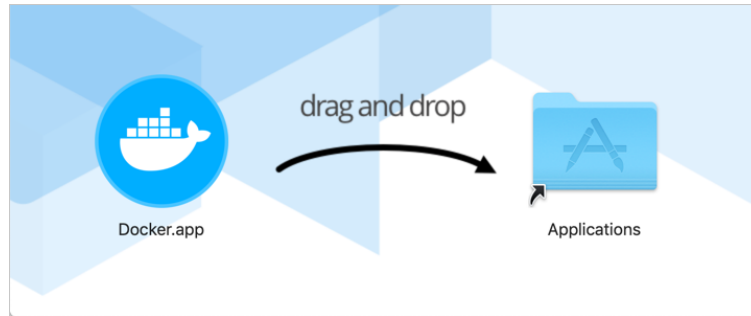
REQUIREMENTS

DOCKER

We have created a docker setup, that takes care of setting up the environment for you.
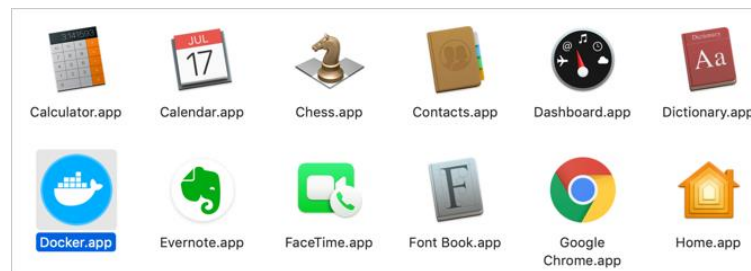
- Docker
- Docker-Compose

INSTALLATION GUIDE

INSTALL DOCKER DESKTOP ON MAC

- Double-click Docker.dmg to open the installer, then drag the Docker icon to the Applications folder.

- Double-click Docker.app in the Applications folder to start Docker. (In the example below, the Applications folder is in "grid" view mode.)
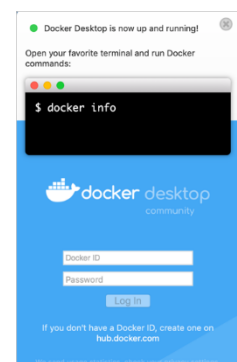

You are prompted to authorize Docker.app with your system password after you launch it. Privileged access is needed to install networking components and links to the Docker apps.

The Docker menu in the top status bar indicates that Docker Desktop is running, and accessible from a terminal.

If you just installed the app, you also get a message with suggested next steps and a link to the documentation. Click the Docker menu (🐳) in the status bar to dismiss this pop-up notification.

- Click the Docker menu (🐳) to see Preferences and other options.
- Select About Docker to verify that you have the latest version.

INSTALL DOCKER ON LINUX SYSTEMS

- Remove any older installations of Docker that may be on your system:

```
sudo apt remove docker docker-engine docker.io
```

- Make sure you have the necessary packages to allow the use of Docker's repository:

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

- Add Docker's GPG key:

```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
```

- Verify the fingerprint of the GPG key:

```
sudo apt-key fingerprint 0EBFCD88
```

You should see output similar to the following:

```
Pub         rsa4096 2017-02-22 [SCEA]
            9DC8 5822 9FC7 DD38 854A  E2D8 8D81 803C 0EBF CD88
Uid                 [ unknown] Docker Release (CE deb)
sub         rsa4096 2017-02-22 [S]
```

- Add the stable Docker repository:

```
sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"
```

> **Note**
> For Ubuntu 19.04, if you get an E: Package 'docker-ce' has no installation candidate error, this is because the stable version of docker is not yet available. Therefore, you will need to use the edge / test repository.
>
> ```
> sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable edge test"
> ```

- Update your package index and install Docker CE:

```
sudo apt update && sudo apt install docker-ce
```

- Add your limited Linux user account to the docker group:

```
sudo usermod -aG docker $USER
```

> **Note**
>
> After entering the usermod command, you will need to close your SSH session and open a new one for this change to take effect.

- Check that the installation was successful by running the built-in "Hello World" program:

```
docker run hello-world
```

INSTALL COMPOSE ON LINUX SYSTEMS

On Linux, you can download the Docker Compose binary from the Compose repository release page on GitHub. Follow the instructions from the link, which involve running the curl command in your terminal to download the binaries. These step-by-step instructions are also included below.

```
For alpine, the following dependency packages are needed: py-pip, python-dev, libffi-dev, openssl-dev, gcc, libc-dev, and make.
```

- Run this command to download the current stable release of Docker Compose:

```
sudo curl -L "https://github.com/docker/compose/releases/download/1.25.4/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
```

```
To install a different version of Compose, substitute 1.25.4 with the version of Compose you want to use.
```

- Apply executable permissions to the binary:

```
sudo chmod +x /usr/local/bin/docker-compose
```

```
Note: If the command docker-compose fails after installation, check your path. You
can also create a symbolic link to /usr/bin or any other directory in your path.
```

For example:

```
sudo ln -s /usr/local/bin/docker-compose /usr/bin/docker-compose
```

- Optionally, install command completion for the bash and zsh shell.
- Test the installation.

```
$ docker-compose -version
docker-compose version 1.25.4, build 1110ad01
```

INSTALL DOCKER DESKTOP ON WINDOWS

- Double-click Docker Desktop Installer.exe to run the installer.
  *If you haven't already downloaded the installer (Docker Desktop Installer.exe), you can get it
  from Docker Hub. It typically downloads to your Downloads folder, or you can run it from the
  recent downloads bar at the bottom of your web browser.*

- Follow the instructions on the installation wizard to accept the license, authorize the installer,
  and proceed with the install.

- When prompted, authorize the Docker Desktop Installer with your system password during
  the install process. Privileged access is needed to install networking components, links to
  the Docker apps, and manage the Hyper-V VMs.

- Click Finish on the setup complete dialog and launch the Docker Desktop application.

STARTUP GUIDE

- CD to directory of the project containing docker-compose.yml:

```
cd shikwa
```

Directory Structure

database	4/16/2020 5:22 PM	File folder	
frontend	4/16/2020 5:22 PM	File folder	
ganache	4/16/2020 5:22 PM	File folder	
shikwa_backend	4/16/2020 5:22 PM	File folder	
docker-compose.yml	4/16/2020 5:22 PM	Yaml Source File	2 KB

- From your project directory, type the following command to build the app with the Compose file, and run it.

```
docker-compose up --build
```