

How to docker?

# Docker something

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# Gliederung

Why use Docker?

## **Trusted by developers. Chosen by Fortune 100 companies.**

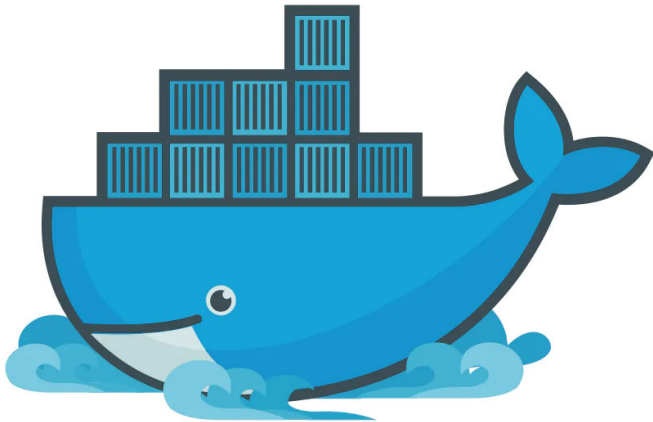
Docker provides a suite of development tools, services, trusted content, and automations, used individually or together, to accelerate the delivery of secure applications.

"a sandboxed process on your machine that is isolated from all other processes on the host machine"

"It works on my computer"

"faster onboarding and testing while also simplifying the deployment of services"

# Wer ist Moby Dock?



# Was ist Docker?

► 1

# Wichtige Begriffe

Docker Container Image Dockerfile Docker Compose Docker Hub  
Docker Desktop

# Hello World

- ▶ Wechsel zu cmd
- ▶ `docker --help`
- ▶ `docker run hello-world`
- ▶ `docker run --help`



# Basic commands

- ▶ `docker run`
- ▶ `docker ps` / `docker ps -a`
- ▶

# Dockerfile

- ▶ FROM, CMD & Entrypoint, RUN, COPY, ARG
- ▶ Layer

# Dockerfile

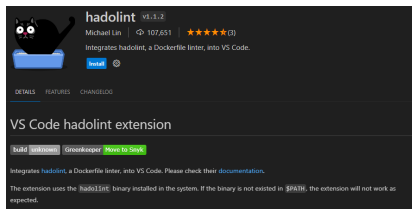


Figure:

# Python bsp

---

```
FROM alpine
```

```
# Exec form
```

```
CMD ["echo", "Hello World."]
```

```
#shell form
```

```
CMD echo Hello Students
```

---

# Volumes



# React

---

```
FROM alpine
```

```
# Exec form
```

```
CMD ["echo", "Hello World."]
```

```
#shell form
```

```
CMD echo Hello Students
```

---

# Multistage builds

► 1

# React - Multistage

---

```
FROM alpine
```

```
# Exec form
```

```
CMD ["echo", "Hello World."]
```

```
#shell form
```

```
CMD echo Hello Students
```

---



# Dockerfile Best practices

- ▶ RUN commands
- ▶ Order of COPY
- ▶ Volumes
- ▶ Multistage

# Docker Compose

- ▶ Vorteile
- ▶ UseCases

# Docker Compose zu Python

---

```
FROM alpine
```

```
# Exec form
```

```
CMD ["echo", "Hello World."]
```

```
#shell form
```

```
CMD echo Hello Students
```

---

# Docker Compose Webapp

---

```
FROM alpine
```

```
# Exec form
```

```
CMD ["echo", "Hello World."]
```

```
#shell form
```

```
CMD echo Hello Students
```

---

# important Commands

- ▶ `docker run`
- ▶ `docker build`
- ▶ `docker push, pull`
- ▶ `docker ps -a`
- ▶ `docker rm / rmi`
- ▶ ...

## Cooler Quellen und so weiter

- ▶ <https://www.docker.com/>
- ▶ <https://docs.docker.com/get-started/>
- ▶