

# Docker something

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# Gliederung

# Wiso, Weshalb, Warum?

- ▶ hier motivation und coole usecases
- ▶ independant entwicklungs umgebung

# Wiso, Weshalb, Warum?

- ▶ hier motivation und coole usecases
- ▶ independant entwicklungs umgebung
- ▶ Kubernetes

# Wiso, Weshalb, Warum?

- ▶ hier motivation und coole usecases
- ▶ independant entwicklungs umgebung
- ▶ Kubernetes
- ▶ ...

# Wer ist Moby Dock?

► 1

# 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

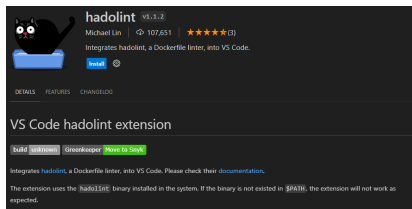


Figure:

# 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

► 1