### Container & Service-oriented architectures

## Setup of your machine

#### Install docker and an IDE

- 1. Download and install Docker Desktop<sup>1</sup>.
- 2. Download and install IntelliJ Ultimate<sup>2</sup>.
- 3. Optional: get an IntelliJ Ultimate Student License<sup>3</sup>.
- 4. Install the IntelliJ Docker plugin<sup>4</sup>.

#### Set up a local development directory

- 1. Create a dedicated project folder for the workshop.
- 2. Create an empty IntelliJ Project: IntelliJ Window: File -> New -> Project from existing sources -> select the freshly created directory.
- 3. Open the folder in you PowerShell (Windows)/ Terminal (macos/Linux).
- 4. Execute the following commands. The second command should give you an output, that is needed to take part in the workshop.
- 5. Post the return text of the second command plus your operating system to the Teams Group.

```
## Get a container for the workshop, this could take a while.
docker run --rm -d --name workshopContainer -it herrsorgenfrei/iac_workshop:latest
## Copy the output of this command to the Microsoft Teams group
docker exec -it workshopContainer bash -c 'date && cat /tmp/test.txt'
## stop the container
```

#### docker stop workshopContainer

- 6. If you have problems setting this up, reach out to a fellow student who can help you! In case you are not able to set it up together, reach out to me (latest 72h before start of the workshop).
- 7. Ensure that your system is set up *before* the workshop on Monday. No further set up help/discussion will happen during the workshop. Thanks

<sup>&</sup>lt;sup>1</sup>https://www.docker.com

<sup>&</sup>lt;sup>2</sup>https://www.jetbrains.com/de-de/idea/download

 $<sup>^3</sup> https://www.jetbrains.com/de-de/community/education/\#students$ 

<sup>&</sup>lt;sup>4</sup>https://plugins.jetbrains.com/plugin/7724-docker

### Timetable

# Prepare the workshop

Participants of the workshop go through this document and prepare their systems to be ready to take part in the workshop.

 $Until\ 5.6.2025$ 

### Workshop Part 1

5.6.2025, 9:30 - 12:15

Onsite - Intro to the topic of containers - Docker basics, working with the docker client  $\operatorname{cli}$ 

#### Homework

5.6.2025

### Workshop Part 2

6.66.2025, 9:30 - 12:15

Remote via Microsoft Teams