

Pipeline with Dockerfile

Up until now, we have only made sure that Github Actions can reach the `hello-world.yaml` configuration file, but not really made it do anything useful.

As a next step, we want Github Actions to do two things:

- clone our project
- build the code using Gradle

Tasks

- Instead of printing "Hello World!", now we want to use a docker image that has both JDK and Gradle installed. After section `runs-on:` add `container: gradle:6-jdk11`

```
container: gradle:6-jdk11
```

- Under the `steps` part, insert a `- uses:` list item to the list (before the existing `- name: my-step` item) with action: `actions/checkout@v2`

```
- name: Clone-down
  uses: actions/checkout@v2
```

- Change the `run` command to run `ci/build-app.sh` as the command instead of `echo "Hello World!"`.

► :bulb: got issues with actions running the script? see here:

In case of issues with access denied add `chmod +x ci/build-app.sh` before the execution, so the entire run script looks like this:

```
- run: chmod +x ci/build-app.sh && ci/build-app.sh
```

If you want to see what `build-app.sh` is doing, look into [the script](#).

- Commit and push the changes. Github Actions should automatically detect your new commit and build again.
- Look into the logs of Github Actions and see if the build was successful.

► :bulb: If you struggle and need to see the whole `***Solution***` you can extend the section below.

```
on: push
jobs:
  Build:
```

```
runs-on: ubuntu-latest
container: gradle:6-jdk11
steps:
  - name: Clone-down
    uses: actions/checkout@v2
  - run: chmod +x ci/build-app.sh && ci/build-app.sh
```

Results

See that the build runs green and outputs this in the step log:

```
Run ./ci/build-app.sh
```

```
Welcome to Gradle 6.9!
```

```
Here are the highlights of this release:
```

- This is a small backport release.
- Java 16 can be used to compile when used with Java toolchains
- Dynamic versions can be used within plugin declarations
- Native support for Apple Silicon processors

```
For more details see https://docs.gradle.org/6.9/release-notes.html
```

```
Starting a Gradle Daemon (subsequent builds will be faster)
```

```
> Task :clean UP-TO-DATE
```

```
> Task :compileJava
```

```
Note: Creating bean classes for 3 type elements
```

```
> Task :processResources
```

```
> Task :classes
```

```
> Task :shadowJar
```

```
Deprecated Gradle features were used in this build, making it incompatible with Gradle 7.0.
```

```
Use '--warning-mode all' to show the individual deprecation warnings.
```

```
See
```

```
https://docs.gradle.org/6.9/userguide/command\_line\_interface.html#sec:command\_line\_warnings
```

```
BUILD SUCCESSFUL in 28s
```

```
4 actionable tasks: 3 executed, 1 up-to-date
```

Congratulations, you have now build the java application!