

제목은 도커로 하겠습니다:
근데 이제 CI/CD를 곁들인 (1)

이준형

2024.11.05

발표 동기

배포해야겠다

어 이거 안되네

코드 고쳐야지

아 빌드해야지



빌드의 모비우스

도커 너 누구데

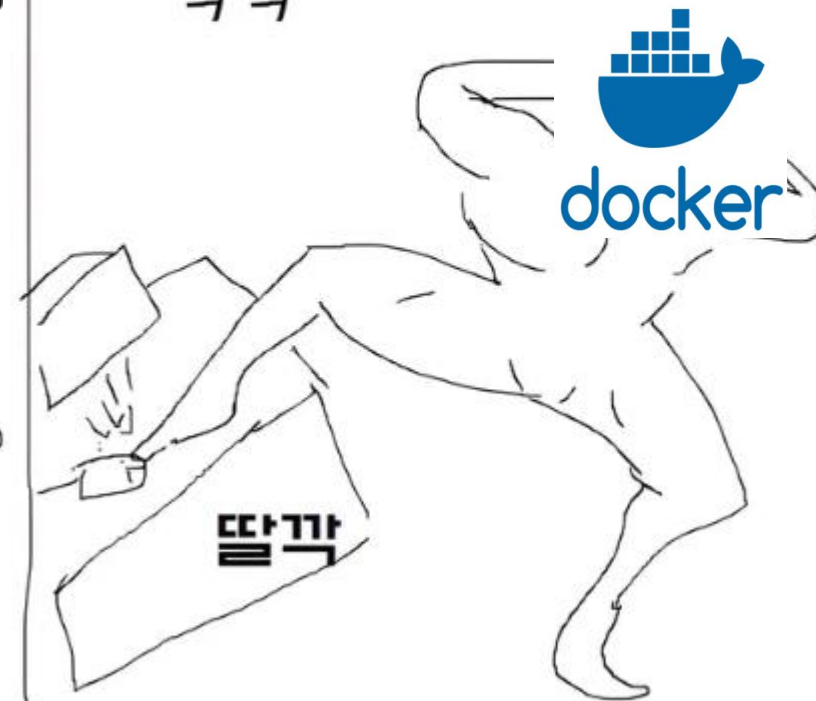
파일
옮기기
SSH 연결
인스턴스
실행

빌드

배포해야한
다



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ㅋㅋ

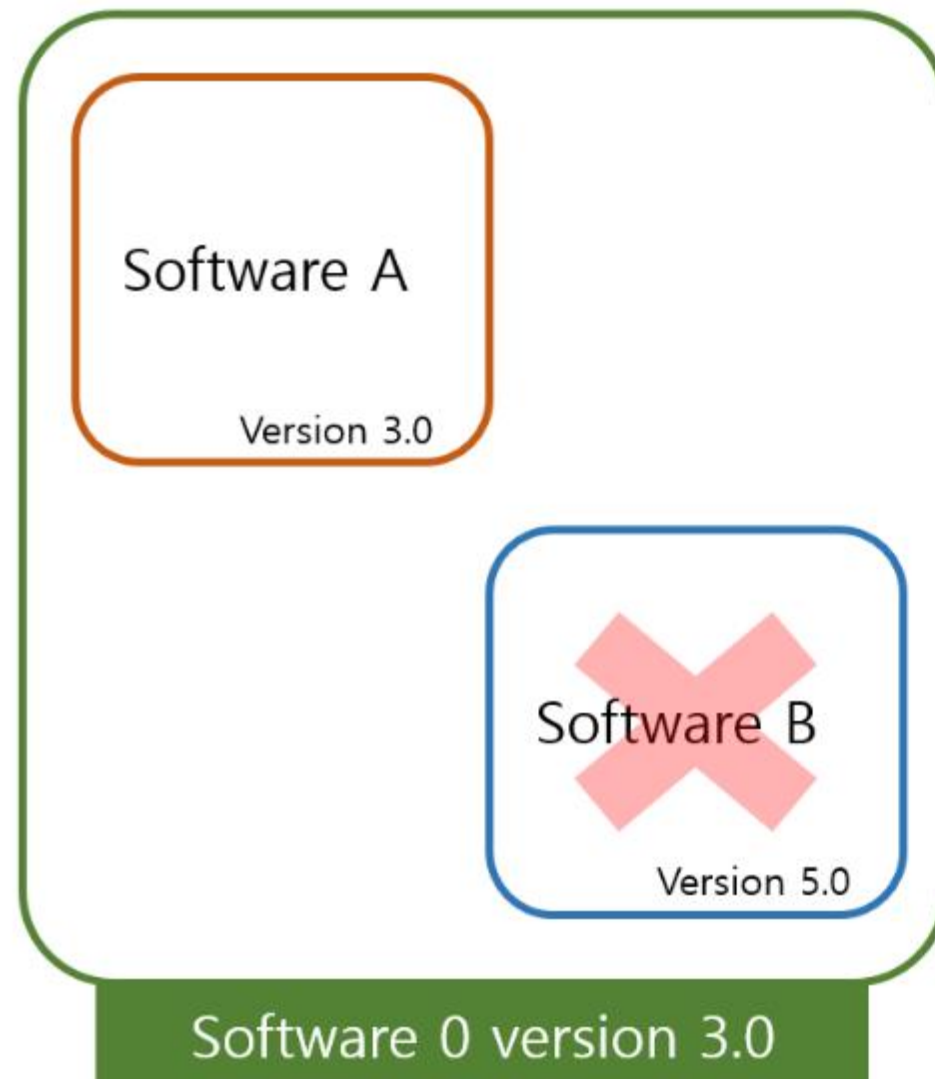


도커 기초 지식 - 딴 짓 하는 타임

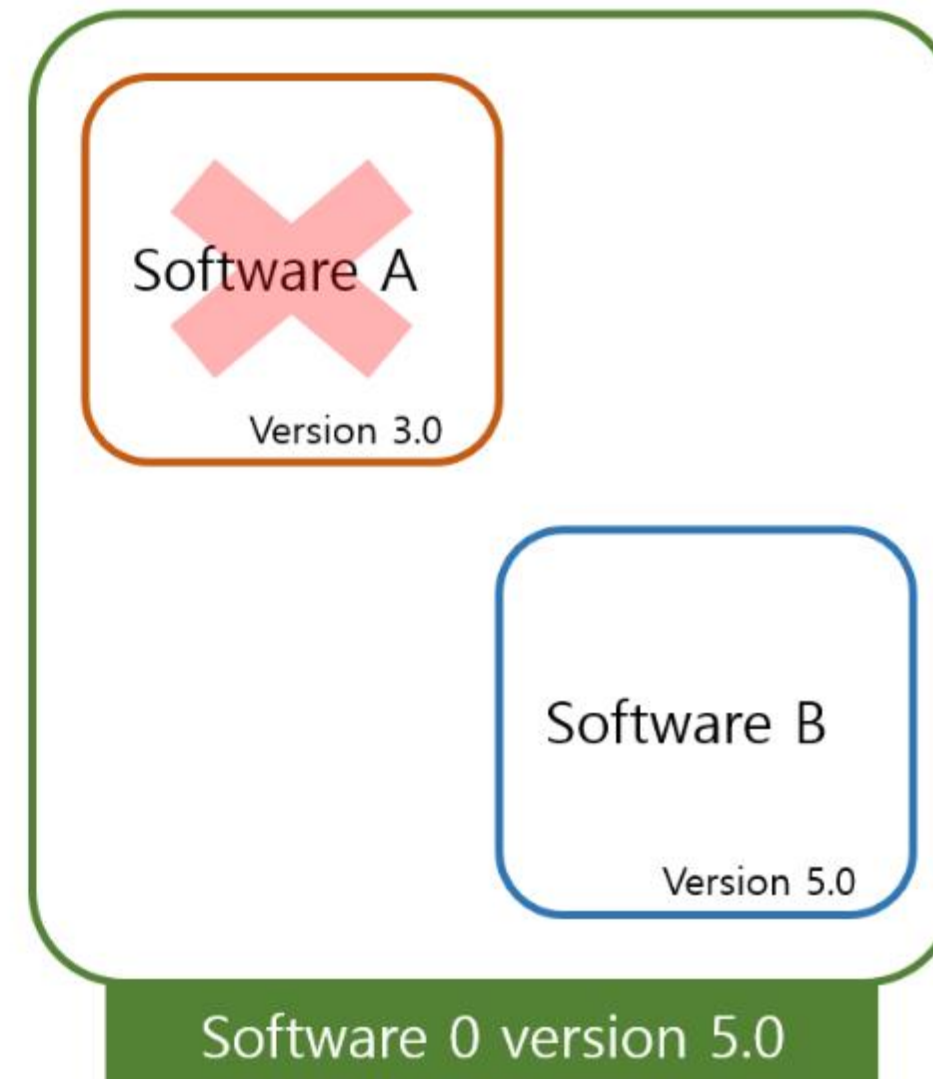
- 동일한 코드라도 다양한 환경에서 배포하는 것은 문제가 될 수 있다.
- 하지만 도커를 사용하면 이런 문제를 해결 할 수 있다.
- 운영체제 위에 도커가 설치되고 컨테이너 단위로 애플리케이션을 실행하게 되는데, 이때 컨테이너들은 서로 격리되어 독립성을 보장한다.
- 이때, 컨테이너는 애플리케이션을 실행하는데 필요한 최소한의 바이너리, 라이브러리를 포함한다.

도커 기초 지식 - 딴 짓 하는 타임

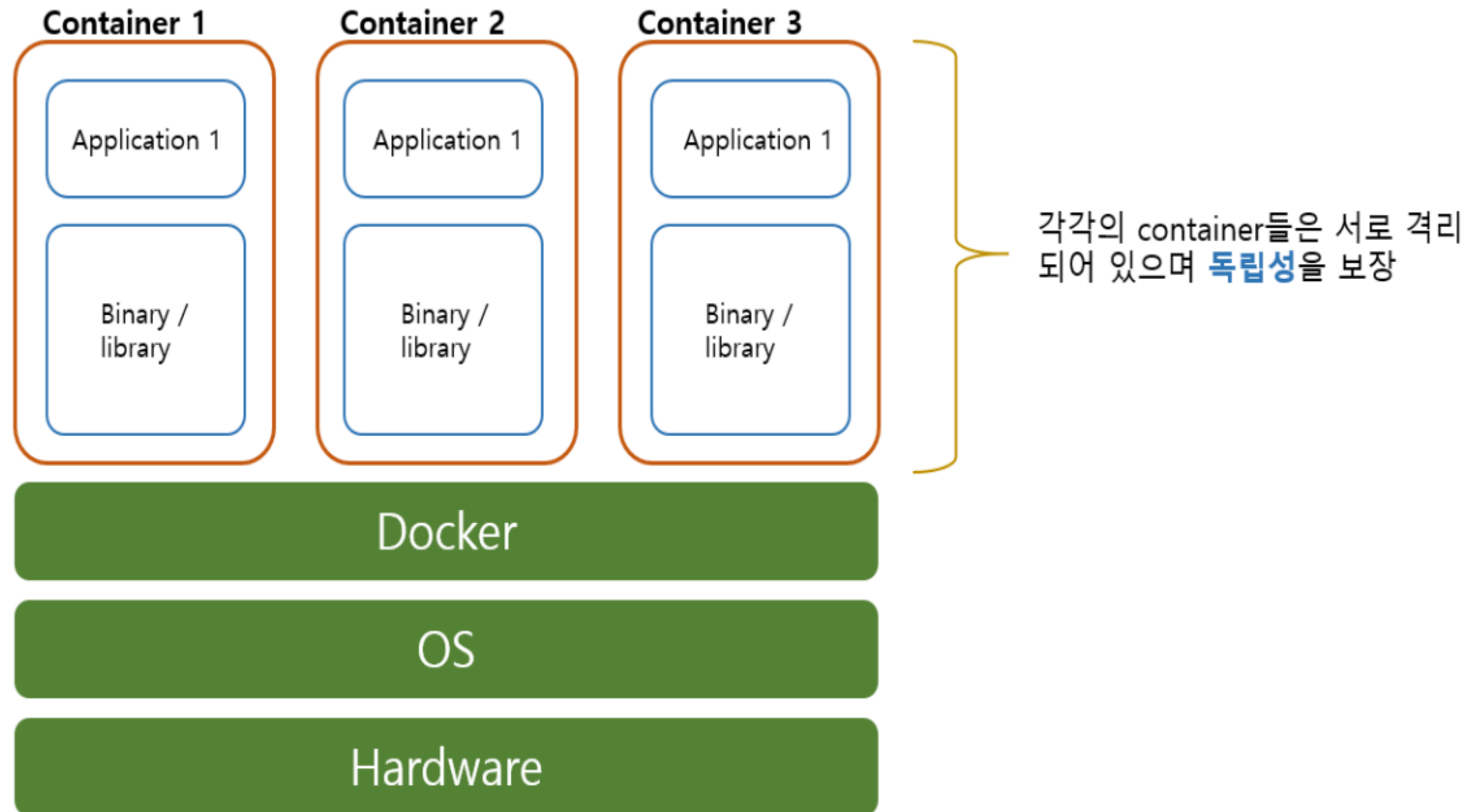
Server A



Server B



도커 기초 지식 - 딴 짓 하는 타임

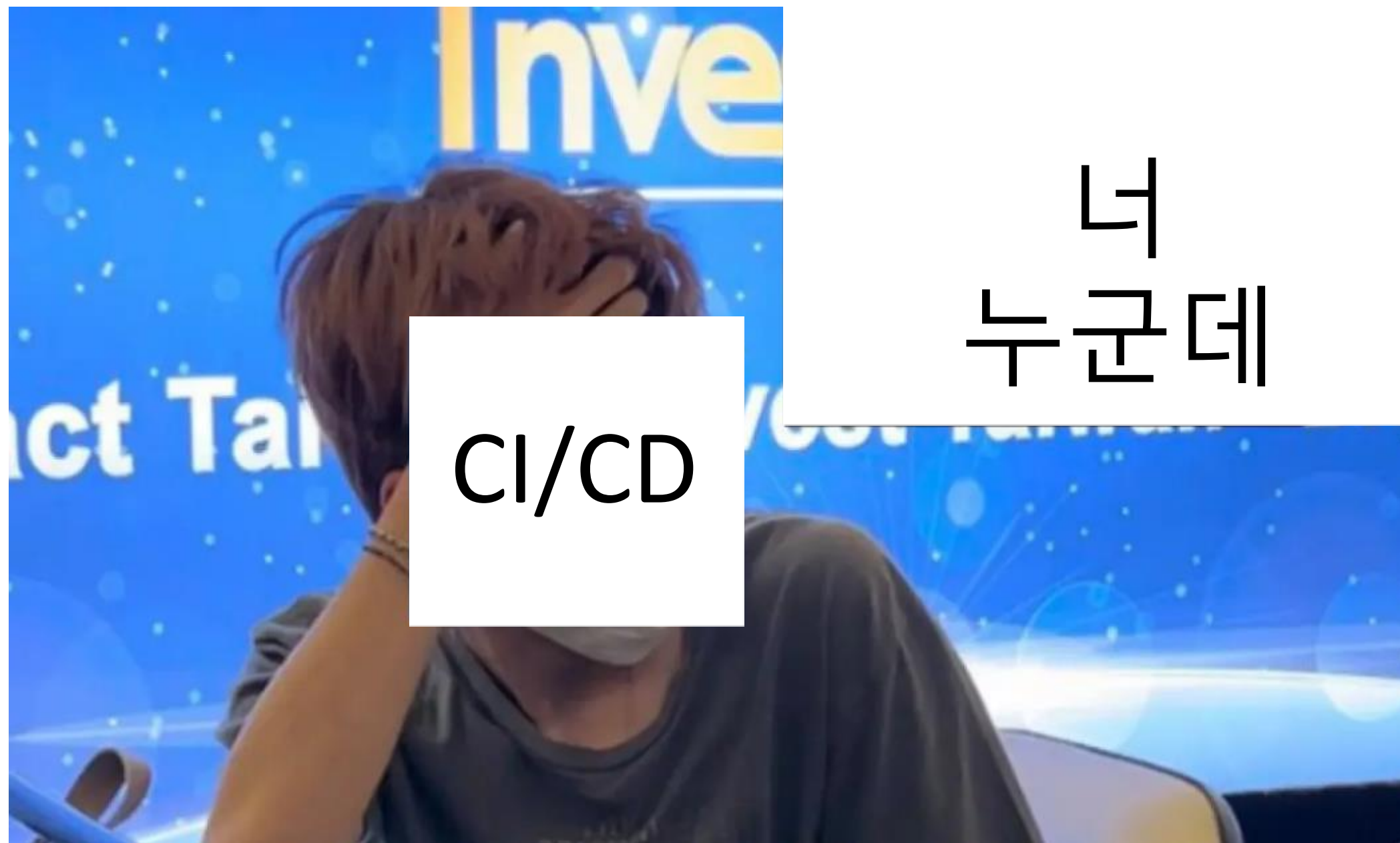




DOCKER



CI/CD란?



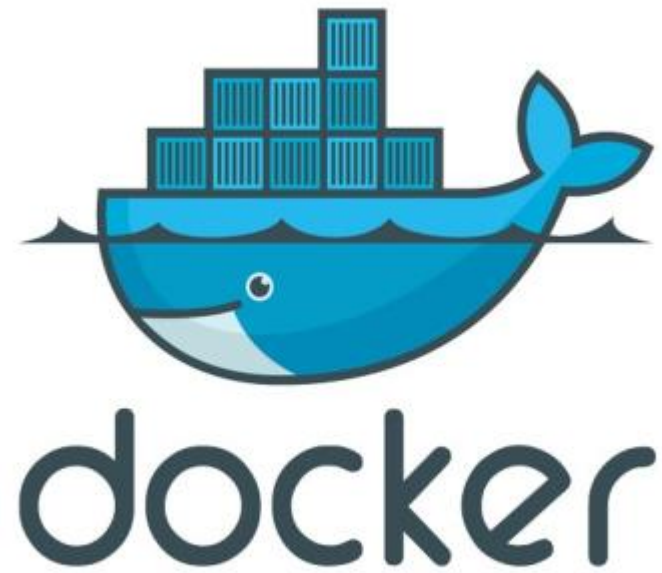
너
누군데

CI/CD란?

(Continuous Integration)
(Continuous Deployment)

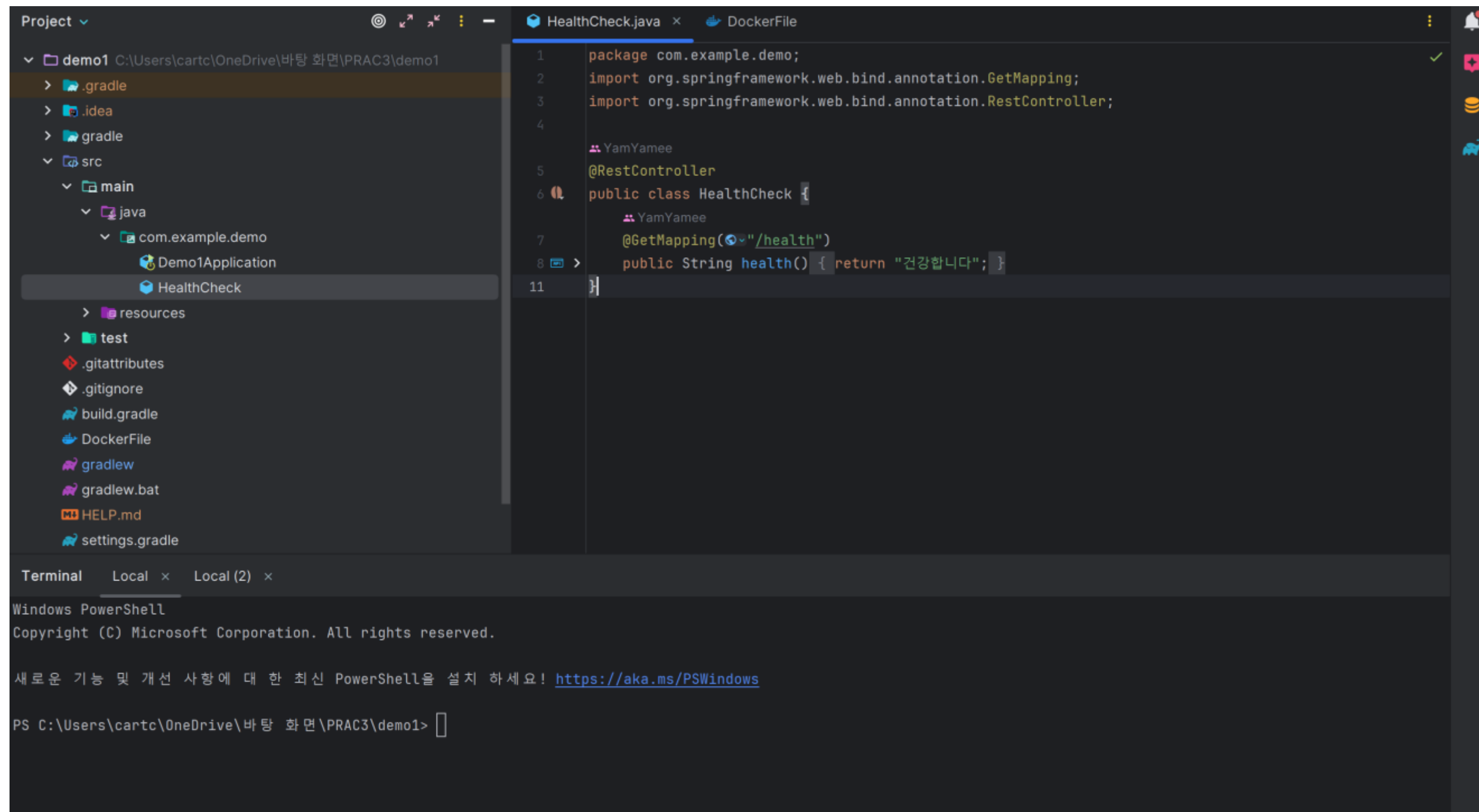
딸깍 한번으로 빌드와 배포를
동시에!

도커로 CI 구축하기

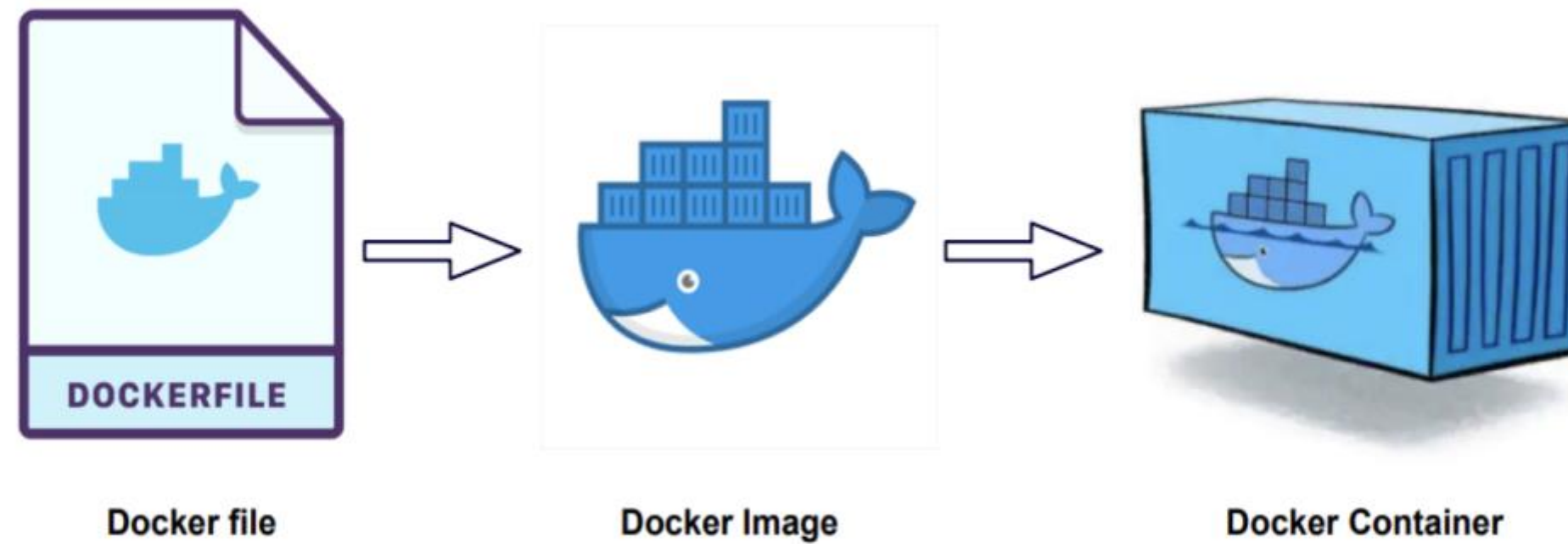


GitHub Actions

일반적인 빌드 과정 - SPRING BOOT



도커를 활용한 빌드 과정 - SPRING BOOT



도커를 활용한 빌드 과정 - SPRING BOOT

```
# Dockerfile

# jdk17 Image Start
FROM openjdk:17

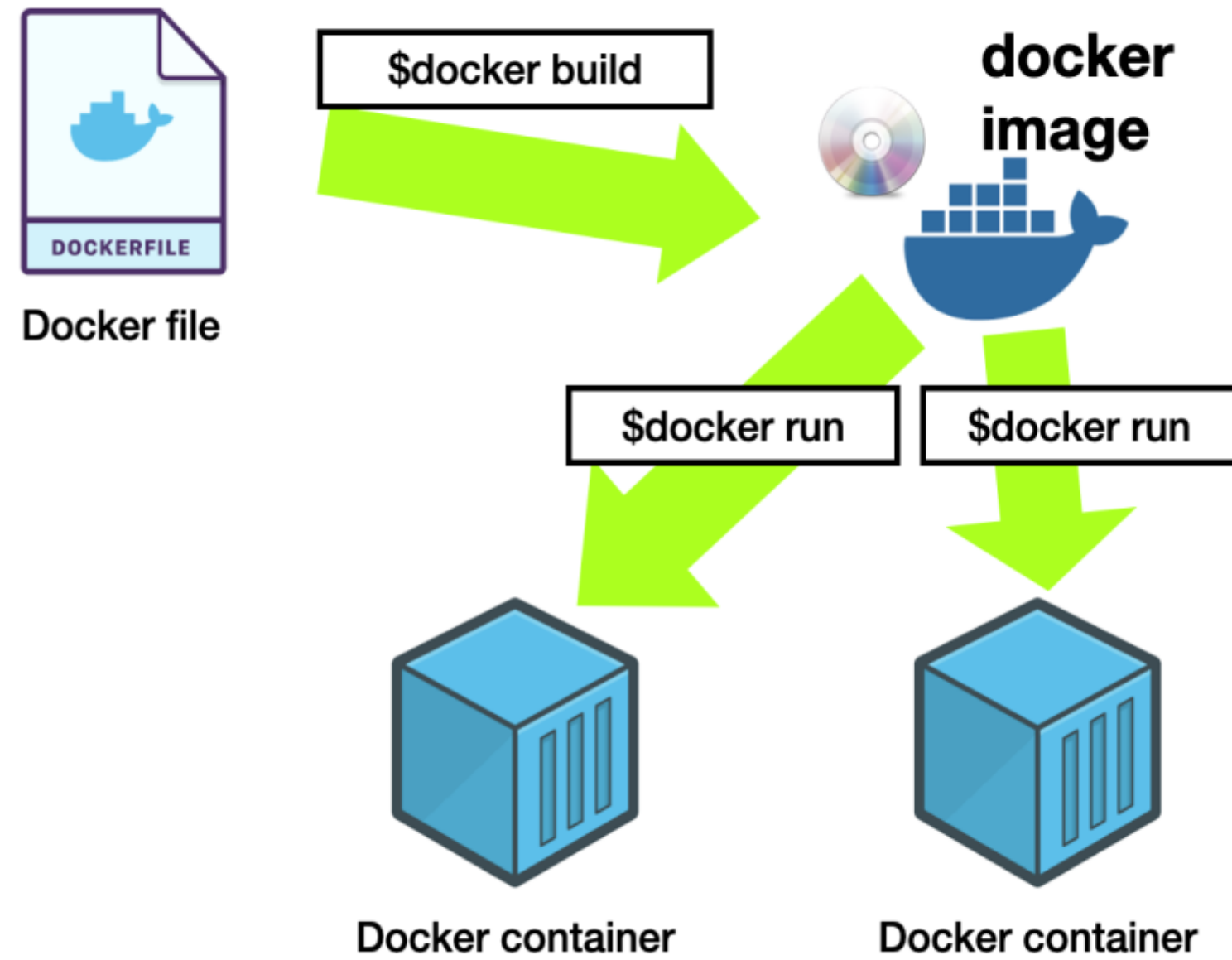
# 인자 설정 - JAR_File
ARG JAR_FILE=build/libs/*.jar

# jar 파일 복제
COPY ${JAR_FILE} app.jar

# 인자 설정 부분과 jar 파일 복제 부분 합쳐서 진행해도 무방
#COPY build/libs/*.jar app.jar


# 실행 명령어
ENTRYPOINT ["java", "-jar", "app.jar"]
```

도커로 CI 구축하기
















도커로 CI 구축하기

 CICICDCD Public

 Pin  Unwatch 1

 master  1 Branch  Tags

 Go to file  Add file  Code

 YamYamee	Update gradle.yml 	31a140a · 12 hours ago	 11 Commits
 .github/workflows	Update gradle.yml		12 hours ago
 gradle/wrapper	git init		13 hours ago
 src	git init		13 hours ago
 .gitattributes	git init		13 hours ago
 .gitignore	git init		13 hours ago
 Dockerfile	Rename DockerFile to Dockerfile		13 hours ago
 build.gradle	git init		13 hours ago
 gradlew	git init		13 hours ago
 gradlew.bat	git init		13 hours ago
 settings.gradle	git init		13 hours ago



도커로 CI 구축하기

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security

Deploy keys

Secrets and variables

Actions

Actions secrets and variables

Secrets and variables allow you to manage reusable configuration data. Secrets are **encrypted** and are used for sensitive data. [Learn more about encrypted secrets](#). Variables are shown as plain text and are used for **non-sensitive** data. [Learn more about variables](#).

Anyone with collaborator access to this repository can use these secrets and variables for actions. They are not passed to workflows that are triggered by a pull request from a fork.

Secrets

Variables

Environment secrets

This environment has no secrets.

Manage environment secrets

Repository secrets

New repository secret

Name	Last updated	
DOCKER_IMAGE	13 hours ago	
DOCKER_PASSWORD	13 hours ago	

도커로 CI 구축하기

<> Code

Issues

Pull requests

Actions

Projects

Security

Insights

Settings

Files

master

Go to file

.github/workflows

gradle.yml

gradle

src

.gitattributes

.gitignore

Dockerfile

build.gradle

gradlew

gradlew.bat

settings.gradle

CICICDCD / .github / workflows / gradle.yml

View Runs

YamYamee Update gradle.yml

31a140a · 12 hours ago

History

Code

Blame

65 lines (53 loc) · 2.08 KB

Code 55% faster with GitHub Copilot

Raw

Copy

Download

Edit

Diff

```
1  name: Java CI with Gradle
2
3  # 동작 조건 설정 : main 브랜치에 push 혹은 pull request가 발생할 경우 동작한다.
4  on:
5    push:
6      branches: [ "master" ]
7    pull_request:
8      branches: [ "master" ]
9
10 permissions:
11   contents: read
12
13 jobs:
14   # Spring Boot 애플리케이션을 빌드하여 도커허브에 푸시하는 과정
15   build-docker-image:
16     runs-on: ubuntu-latest
17     steps:
18     - uses: actions/checkout@v3
19     # 1. Java 17 세팅
20     - name: Set up JDK 17
21       uses: actions/setup-java@v3
22       with:
23         java-version: '17'
24         distribution: 'temurin'
```


도커로 CI 구축하기

2. Spring Boot 애플리케이션 빌드

- name: Run chmod to make gradlew executable
run: chmod +x ./gradlew
- name: Build with Gradle
uses: gradle/gradle-build-action@67421db6bd0bf253fb4bd25b31ebb98943c375e1
with:
arguments: clean bootJar

3. Docker 이미지 빌드

- name: docker image build
run: docker build -t '\${{ secrets.DOCKER_USERNAME }}/github-actions-demo' .

4. DockerHub 로그인

- name: docker login
uses: docker/login-action@v2
with:
username: \${{ secrets.DOCKER_USERNAME }}
password: \${{ secrets.DOCKER_PASSWORD }}

5. Docker Hub 이미지 푸시

- name: docker Hub push
run: docker push \${{ secrets.DOCKER_USERNAME }}/github-actions-demo



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도커로 CI 구축하기

Repositories

Starred

Contributed



Search by repository name

Displaying 1 to 3 of 3 repositories



hangeul1234/github-actions-demo

By [hangeul1234](#) · Updated 13 hours ago

↓7 · ☆0



hangeul1234/prac2

By [hangeul1234](#) · Updated 14 hours ago

























↓10 · ☆0



DOCKER

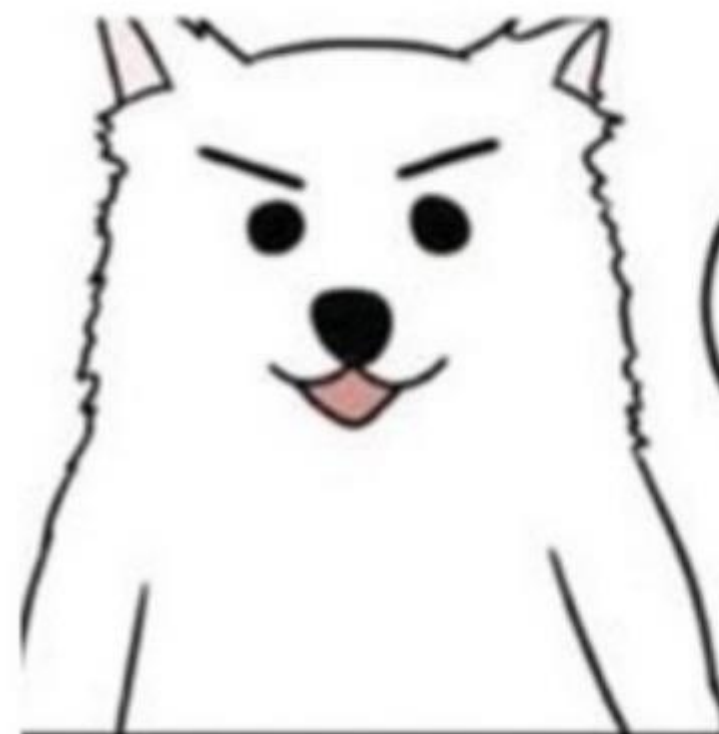


트러블 슈팅

 Rename DockerFile to Dockerfile Java CI with Gradle #8: Commit c9ab5f6 pushed by YamYamee	master	 13 hours ago  2m 52s	...
 Update gradle.yml Java CI with Gradle #7: Commit 0263c84 pushed by YamYamee	master	 13 hours ago  2m 47s	...
 Update gradle.yml Java CI with Gradle #6: Commit 4d4d61e pushed by YamYamee	master	 13 hours ago  2m 38s	...
 Update gradle.yml Java CI with Gradle #5: Commit 1fff1cd pushed by YamYamee	master	 13 hours ago  2m 50s	...
 Update gradle.yml Java CI with Gradle #4: Commit 9cd91d2 pushed by YamYamee	master	 13 hours ago  2m 57s	...
 Create gradle.yml Java CI with Gradle #3: Commit 3facd9c pushed by YamYamee	master	 13 hours ago  2m 24s	...
 Update gradle.yml Java CI with Gradle #2: Commit e378126 pushed by YamYamee	master	 13 hours ago  2m 29s	...
 Create gradle.yml Java CI with Gradle #1: Commit 7cb445c pushed by YamYamee	master	 13 hours ago  2m 26s	...



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CD까지
조지고 올게!



하지만
언제나 조져지는 건
나였다

MIRI COMPANY

하찮은 강의 들어주셔서

THANK YOU.