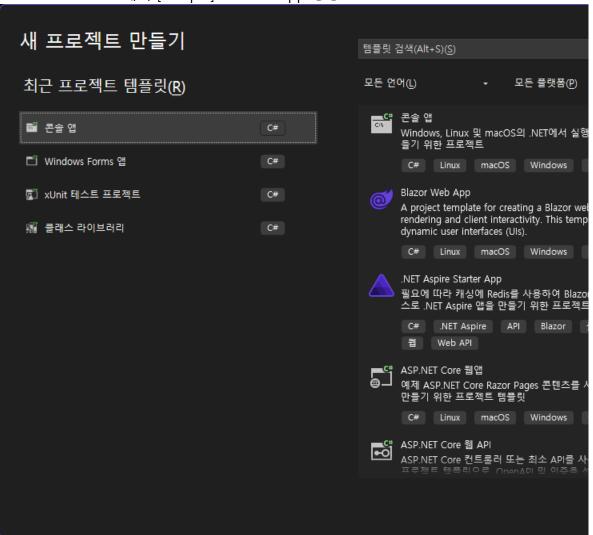
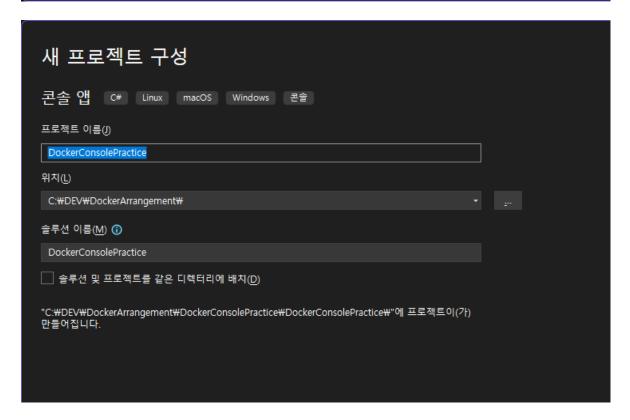
VisualStudio 2022에서 [Sample] Console App 생성





#### 프로그램 구성

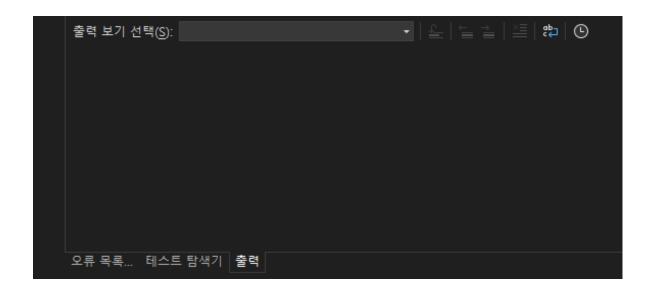
```
프로젝트(P)
▶ 파일(F) 편집(E) 보기(V) Git(G)
                                              빌드(B)
                                                     디버그(D)
                                                               테스트(S)
 ⑥ - ◎ | 🏗 - 🚅 📙 🗐 | り - 🧠 - | Debug - | Any CPU

    DockerConsolePra

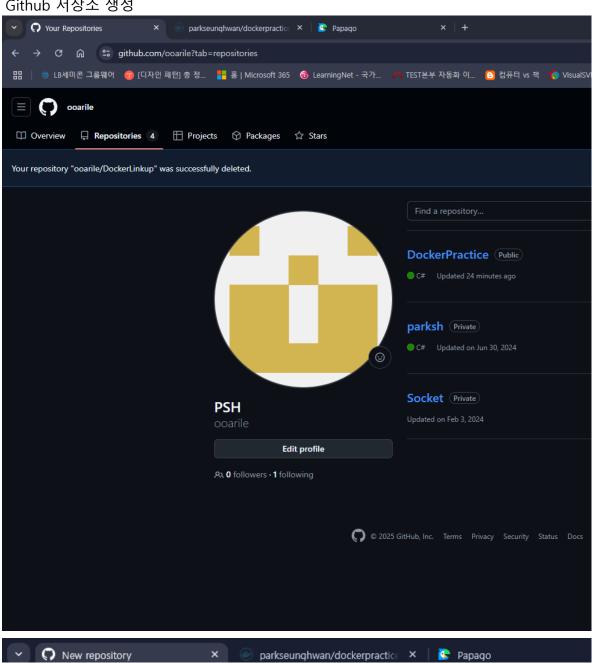
   Program.cs* → X

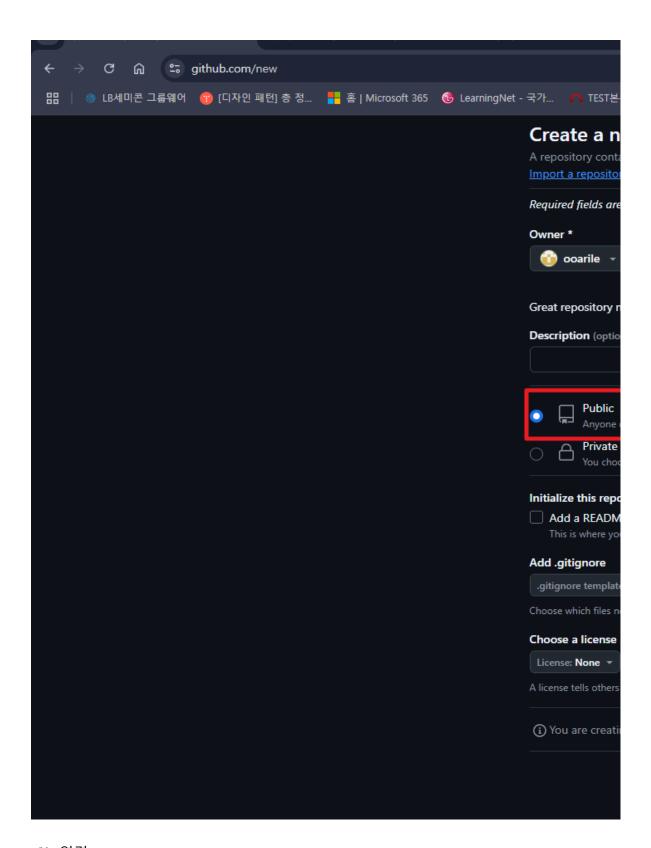
☐ DockerConsolePractice

               v namespace DockerConsolePractice
     {┢
           2
                     참조 0개
                     class Program
                         참조 0개
                         static void Main()
                             string path = "/app"; // Docker 컨테이너 내의 경
                             if (!Directory.Exists(path))
                                 Directory.CreateDirectory(path);
          10
                                 Console.WriteLine($"Directory created at {p
          11
          12
                             else
          13
                                 Console.WriteLine($"Directory 삭제 : {path}
          15
                                 Directory.Delete(path, true); // true param
          17
                             path = "/app/myfolder"; // Docker 컨테이너 내의
                             if (!Directory.Exists(path))
          20
          21
                                 Directory.CreateDirectory(path);
          23
                                 Console.WriteLine($"Directory created at {p
          24
                             else
          25
          26
                                 Console.WriteLine($"Directory 삭제 : {path}
                                 Directory.Delete(path, true); // true param
          28
                문제가 검색되지 않음
   90 %
          - 🔊
   출력
```

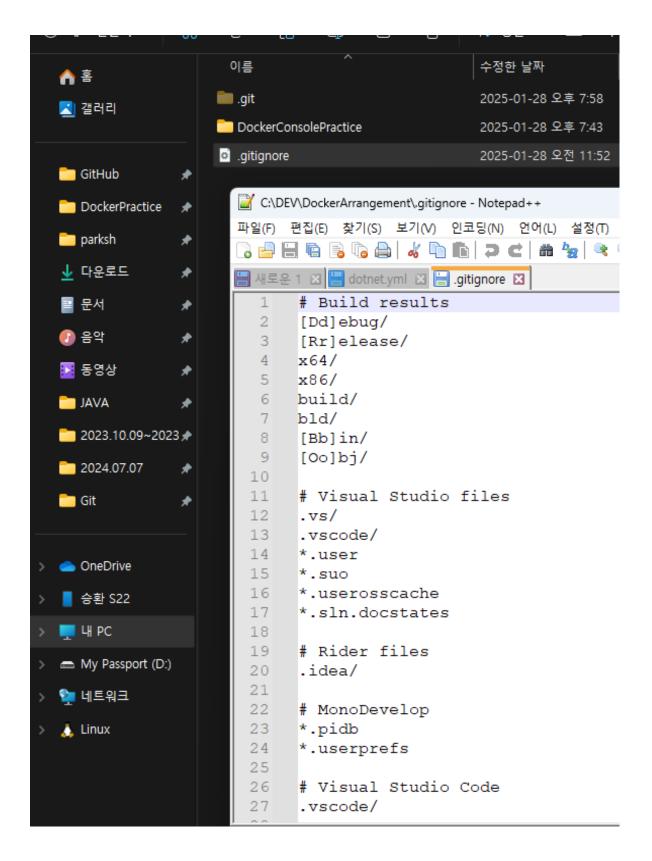


# Github 저장소 생성

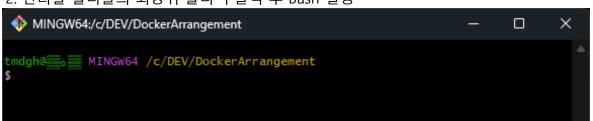




# Git 연결



# 2. 관리할 폴더들의 최상위 폴더 우클릭 후 Bash 실행

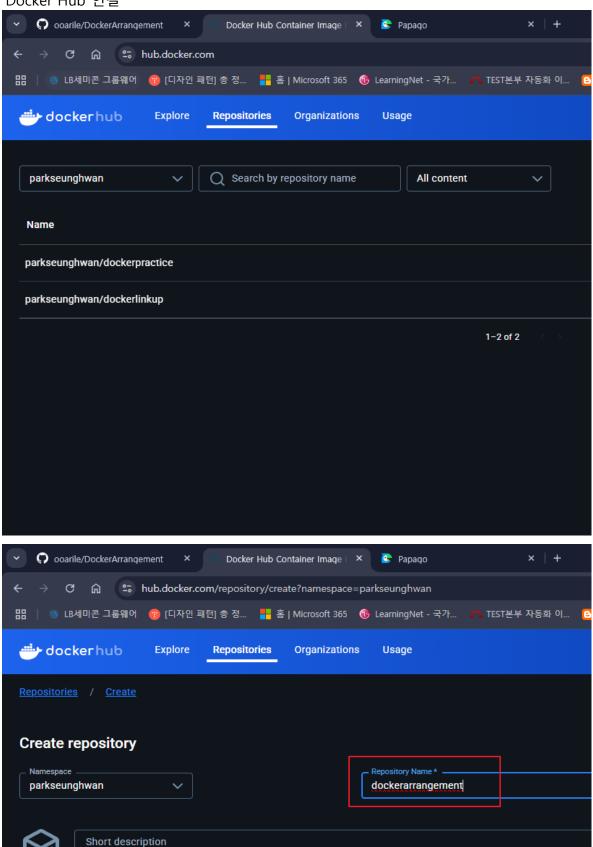


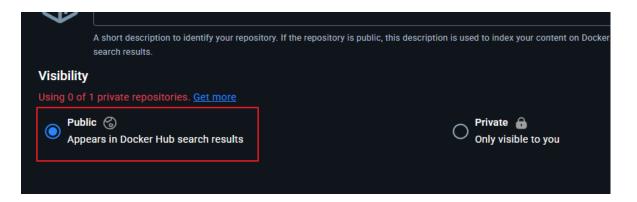
```
MINGW64:/c/DEV/DockerArrangement
tmdgh@____ MINGW64 /c/DEV/DockerArrangement (master)
$ git config --global user.name parksh
tmdgh@____ MINGW64 /c/DEV/DockerArrangement (master)
$ git config --global user.email tmdghks0906@gmail.com
tmdgh@:::: MINGW64 /c/DEV/DockerArrangement (master)
$ git init
Reinitialized existing Git repository in C:/DEV/DockerArrangement/.git/
tmdgh@::: MINGW64 /c/DEV/DockerArrangement (master)
$ git add .
tmdgh@____ MINGW64 /c/DEV/DockerArrangement (master)
$ git commit -m "init"
[master (root-commit) afeaf4f] init
 4 files changed, 144 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 DockerConsolePractice/DockerConsolePractice.sln
 create mode 100644 DockerConsolePractice/DockerConsolePractice/DockerConsolePracti
create mode 100644 DockerConsolePractice/DockerConsolePractice/Program.cs
$ git remote add origin https://github.com/ooarile/DockerArrangement.git
$ git push origin master
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 12 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (8/8), 1.70 KiB | 1.70 MiB/s, done.
Total 8 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ooarile/DockerArrangement.git
   [new branch]
                    master -> master
```

```
git config --global user.name [닉네임] --> 누가커밋했는지 나타내는 용도이므로 자유롭? git config --global user.email [로그인 ID] --> Git Hub 로그인 Email 주소 git init git add . 또는 git add [폴더명] git commit -m "[커밋할 내용]"
```

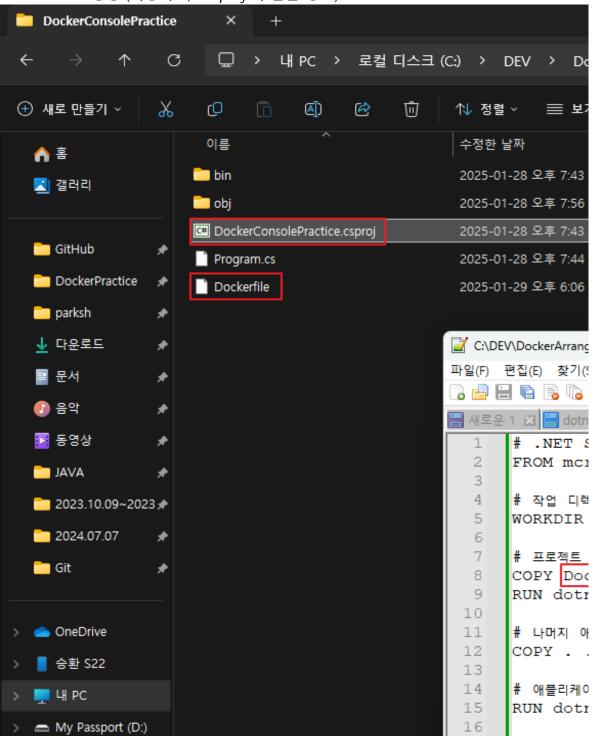
git remote add origin https://github.com/ooarile/DockerArrangement.git git push origin [master or 브렌치명]

#### Docker Hub 연결





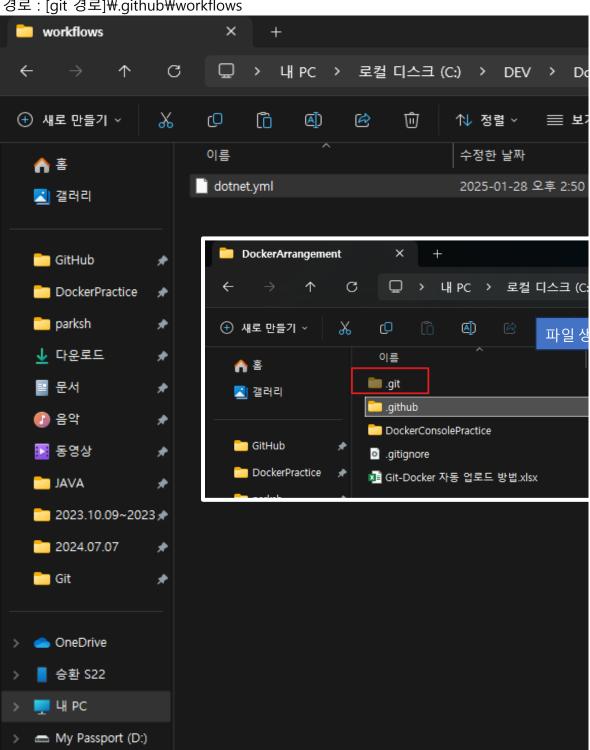
1. Dockerfile 생성 (확장자 X, \*.csproj 와 같은 경로)

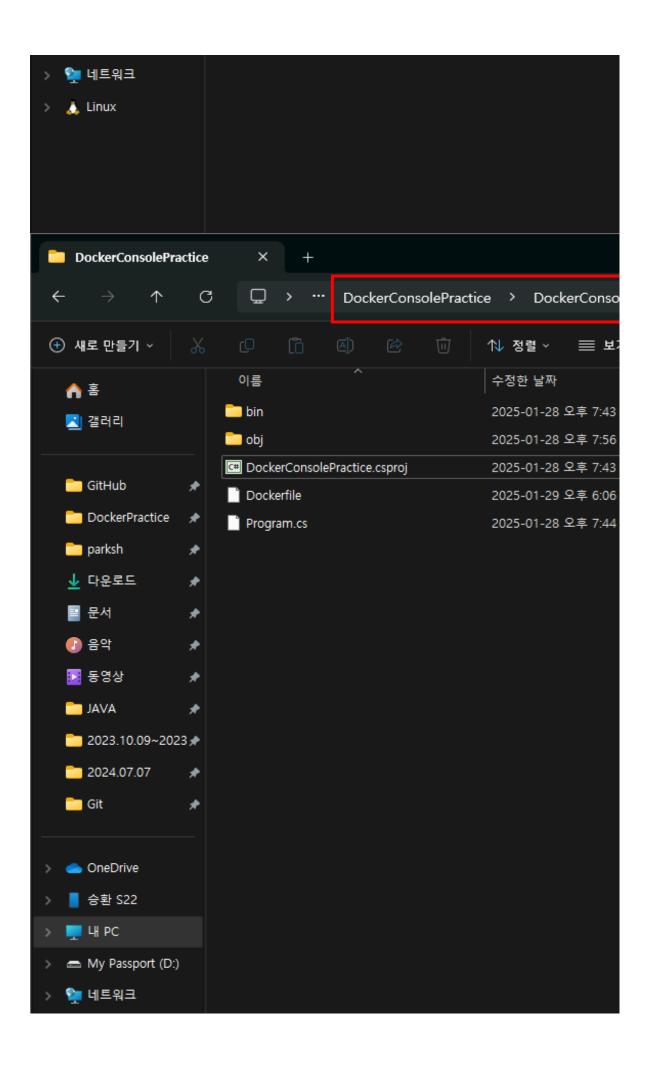


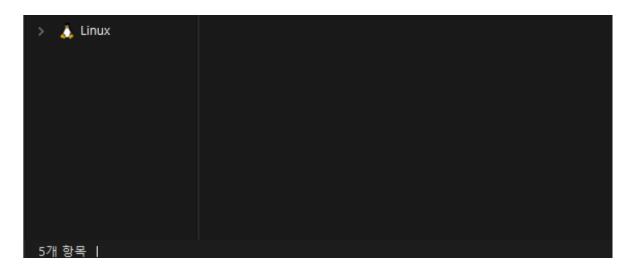


# 2. dotnet.yml 생성

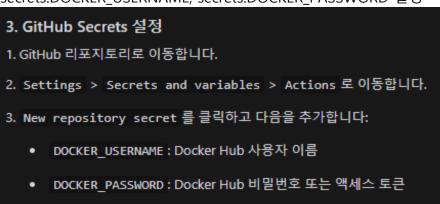
경로 : [git 경로]₩.github₩workflows

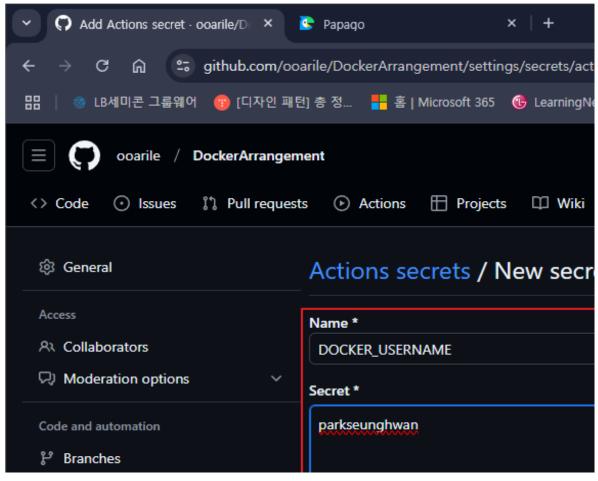


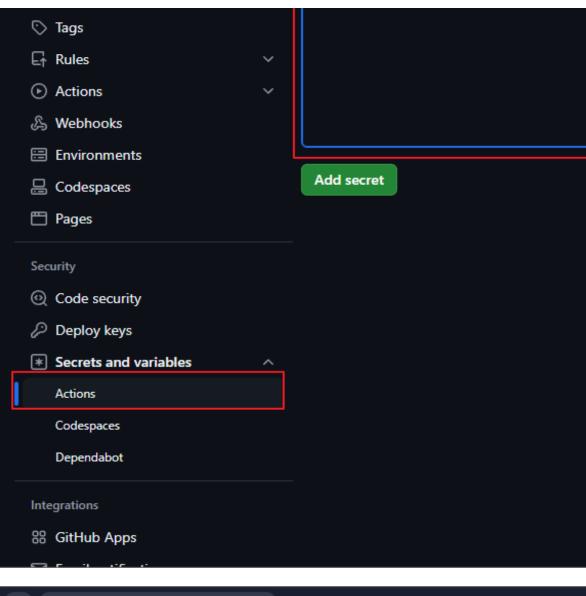


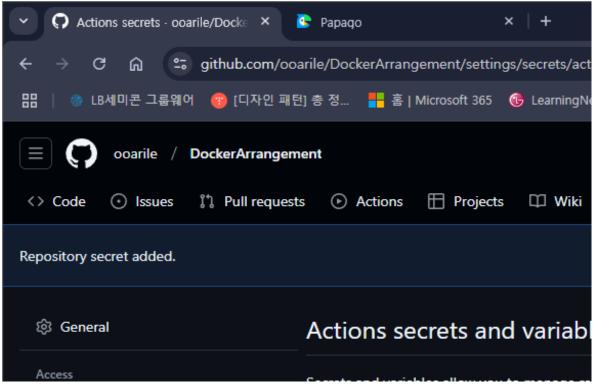


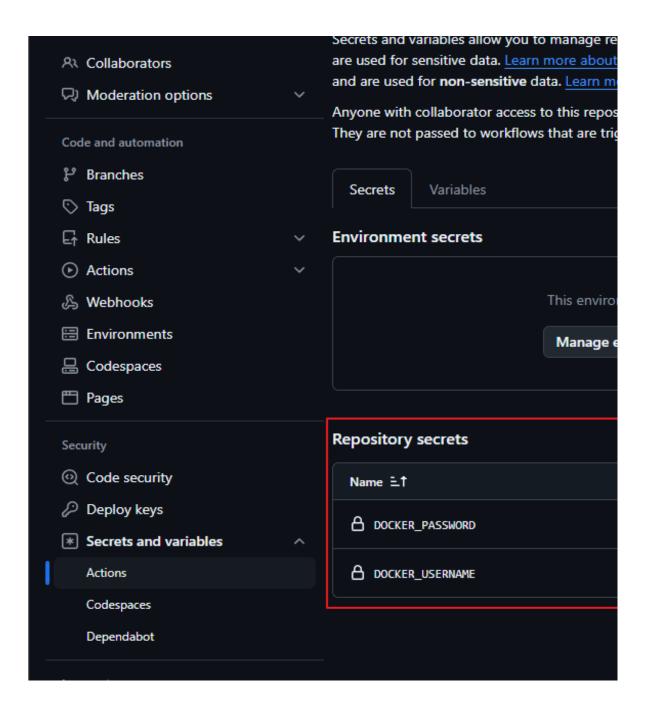
# secrets.DOCKER\_USERNAME, secrets.DOCKER\_PASSWORD 설정











# 4. 커밋 및 푸시

이제 main 브랜치에 커밋을 푸시하면 GitHub Actions가 자동으로 Docker 이미지를 빌드하고 Docker이 설정을 통해 GitHub와 Docker Hub가 자동으로 연동되어 커밋 시 Docker 이미지를 관리할 수 있습

```
tmdgh@@@ MINGW64 /c/DEV/DockerArrangement (master)

$ git add .

tmdgh@@@ MINGW64 /c/DEV/DockerArrangement (master)

$ git commit -m "연통 test"

[master 7f664a2] 연통 test

3 files changed, 63 insertions(+)

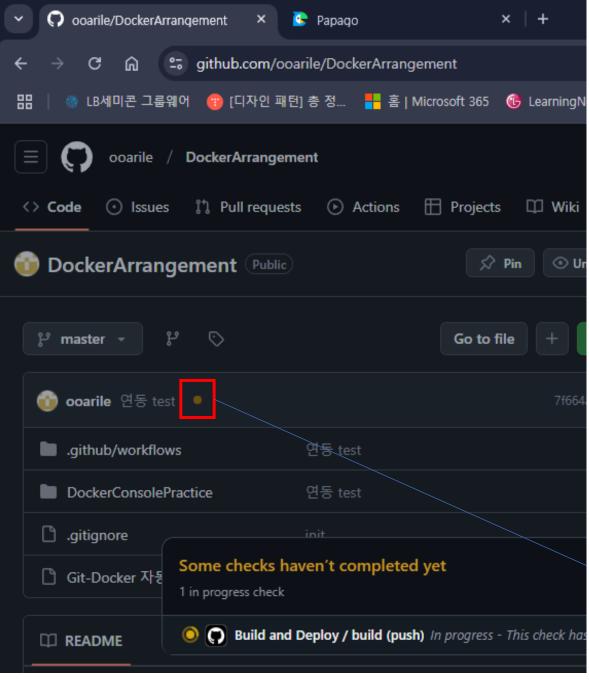
create mode 100644 .github/workflows/dotnet.yml

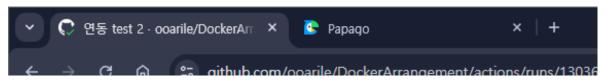
create mode 100644 DockerConsolePractice/DockerConsolePractice/Dockerfile

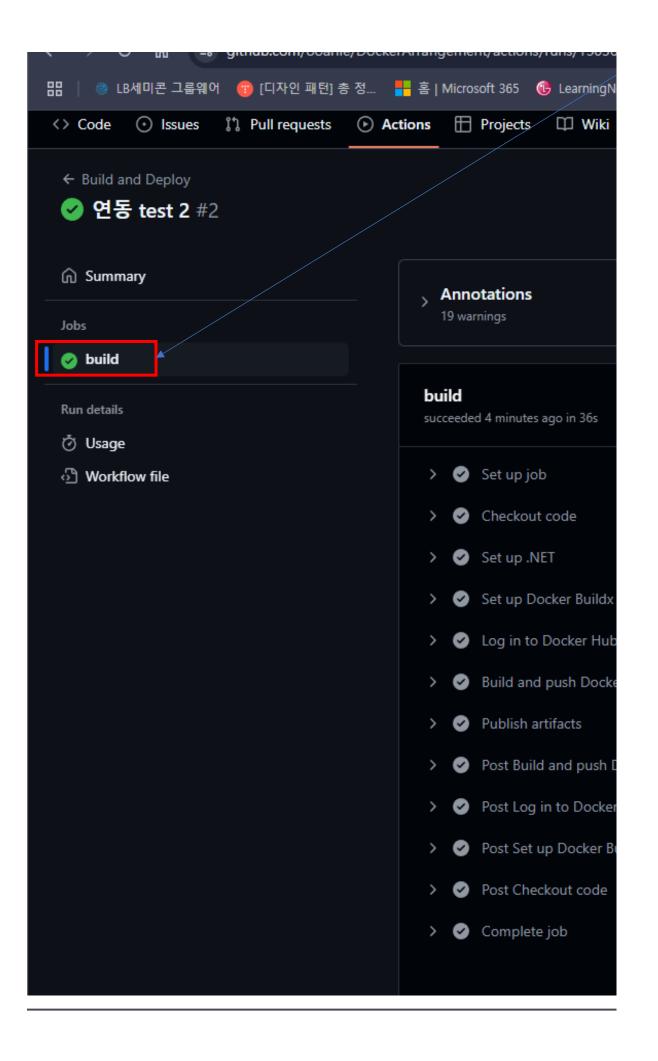
create mode 100644 "Git-Docker \354\236\220\353\217\231 \354\227\205\353\241\234
```

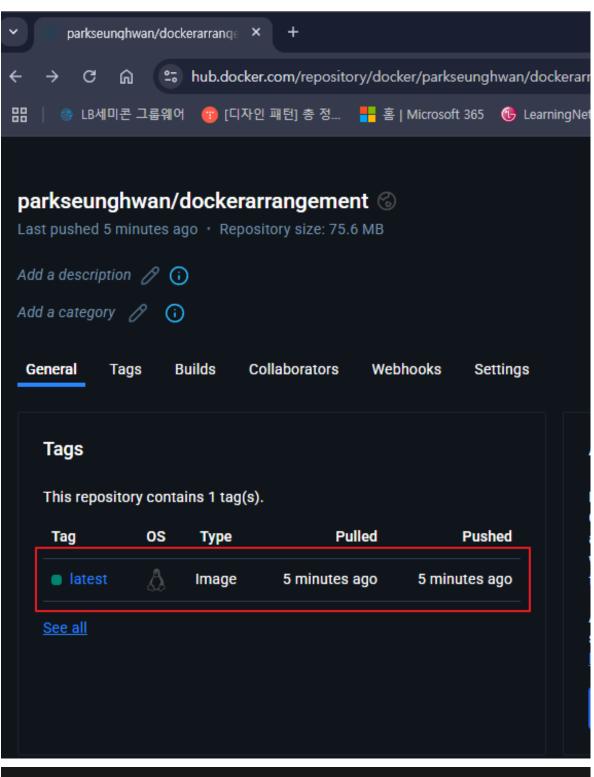
```
tmdgh@@@ MINGW64 /c/DEV/DockerArrangement (master)

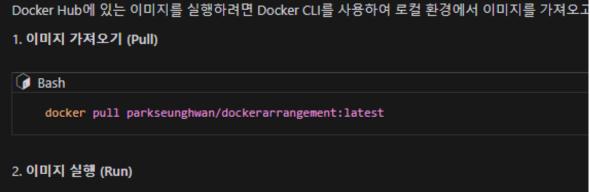
$ git push origin master
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 12 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (9/9), 1.26 MiB | 2.51 MiB/s, done.
Total 9 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/ooarile/DockerArrangement.git
    afeaf4f..7f664a2 master -> master
```







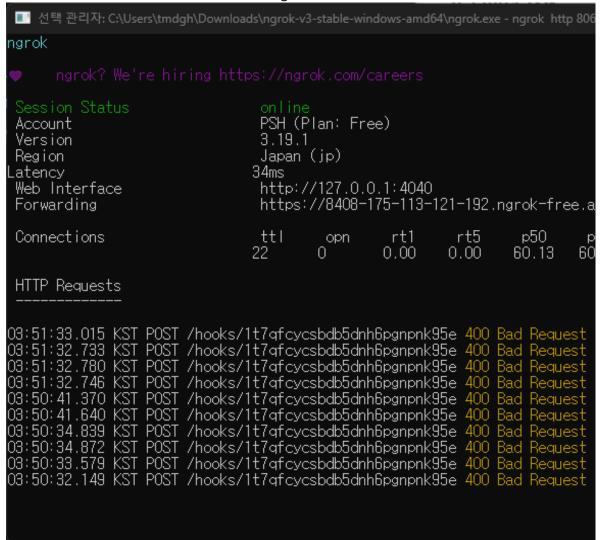




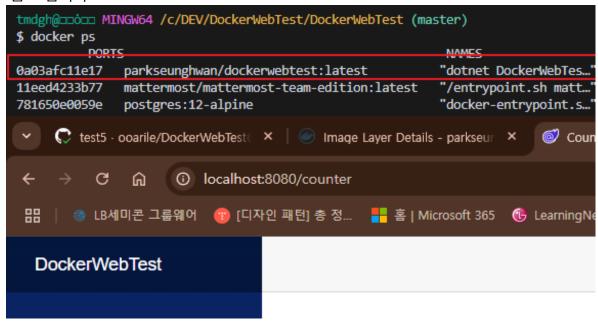
```
🚺 Bash
    docker run -d parkseunghwan/dockerarrangement:latest
PROBLEMS
           OUTPUT
                   DEBUG CONSOLE
                                  TERMINAL
                                            PORTS
$ docker pull parkseunghwan/dockerarrangement:latest
latest: Pulling from parkseunghwan/dockerarrangement
af302e5c37e9: Already exists
91ab5e0aabf0: Already exists
1c1e4530721e: Already exists
1f39ca6dcc3a: Already exists
ea20083aa801: Already exists
7e6a86f56d09: Pull complete
896a7c7e8408: Pull complete
Digest: sha256:b5951b9f02944e2a38868da16dd43b7e1295aa4486199b5f13c9ffcd54187b47
Status: Downloaded newer image for parkseunghwan/dockerarrangement:latest
docker.io/parkseunghwan/dockerarrangement:latest
What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout qu
docker run -d parkseunghwan/dockerarrangement:latest
 /t/a0/4t4dd/t1c69cb8a6105c6et/29tddb052tec3c258de1b255e32ec0286b
```

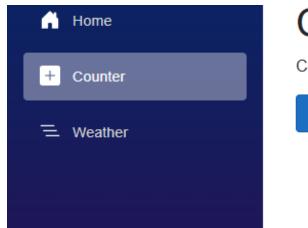
#### 참고:

mattermost와 github와 webhook연결하려면 middleware가 있어야 한다. (다이렉트 시도<sup>₹</sup> 외부에서 Localhost로 webhook 접속시 ngrok를 사용해서 주소를 받아야 한다.



#### 웹도 됩니다





# Counter

Current count: 8

Click me

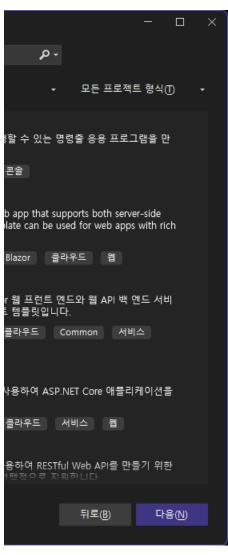
# docker-compose 사용하면 알아서 dockerHub 이미지 다운받아 실행시킨다

```
C:\DEV\DockerWebTest\DockerWebTest\docker-compose.yml - Notepad++
파일(F) 편집(E) 찾기(S) 보기(V) 인코딩(N) 언어(L) 설정(T) 도구(O) 매크로 실행 플러그인
🚽 Dockerfile 🗵 🔚 dotnet.yml 🗵 🔚 docker-compose.yml 🗵
  1
       version: '3.8'
  2
  3
      -services:
  4
         web:
      5
           image: parkseunghwan/dockerwebtest:latest
           build:
  6
  7
             context: .
  8
             dockerfile: Dockerfile
  9
           ports:
             - "80:8080"
 10
```

#### Docker 이미지가 어떤 OS와 버전에서 구동되는지 확인하는 법

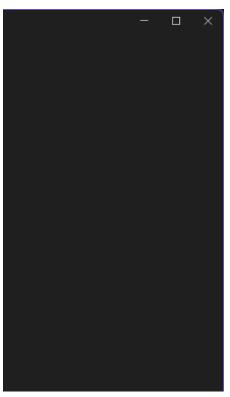
```
docker inspect parkseunghwan/dockerwebtest:latest
$
E
       "Id": "sha256:56283394a2db96c98d2365ed333632523d082e11e014d3e0cdbc942d85b
       "RepoTags": [
          "parkseunghwan/dockerwebtest:latest"
       "RepoDigests": [
           parkseunghwan/dockerwebtest@sha256:56283394a2db96c98d2365ed33363252
       "Parent": "",
       "Comment": "buildkit.dockerfile.v0",
       "Created": "2025-01-30T06:48:12.069510773Z",
       "DockerVersion": "27.4.0",
       "Author": "",
       "Config": {
          "Hostname": ""
          "Domainname": ""
```

```
"User":
"AttachStdin": false,
"AttachStdout": false,
"AttachStderr": false,
"ExposedPorts": {
    "80/tcp": {}
"OpenStdin": false,
"StdinOnce": false,
"Env": [
    "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bi
    "APP_UID=1654",
    "ASPNETCORE_HTTP_PORTS=8080",
    "DOTNET_RUNNING_IN_CONTAINER=true",
    "DOTNET_VERSION=8.0.12",
"ASPNET_VERSION=8.0.12"
],
"Cmd": null,
". "",
"Image": "",
"Volumes": null,
"WorkingDir": "/app",
"Entrypoint": [
    "dotnet",
```



#### 주의

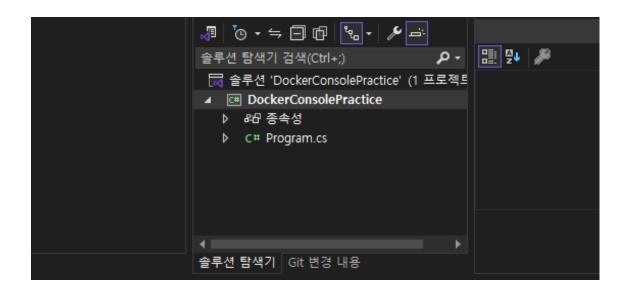
- 1. .net framework는 리눅스 사용 안된
- 2. .net core, .net 5 이상은 리눅스 사용 가능
- 3. 파일 경로: Windows는 ₩를, Linux는 /를
- 4. Linux에서는 파일 및 디렉토리에 대한 권한

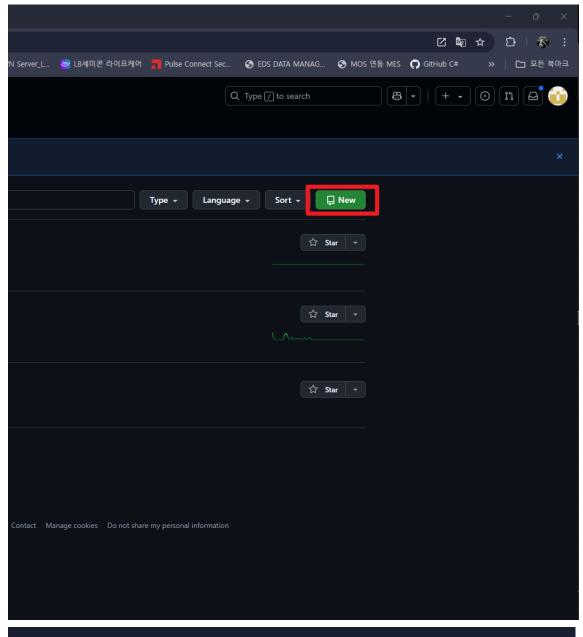


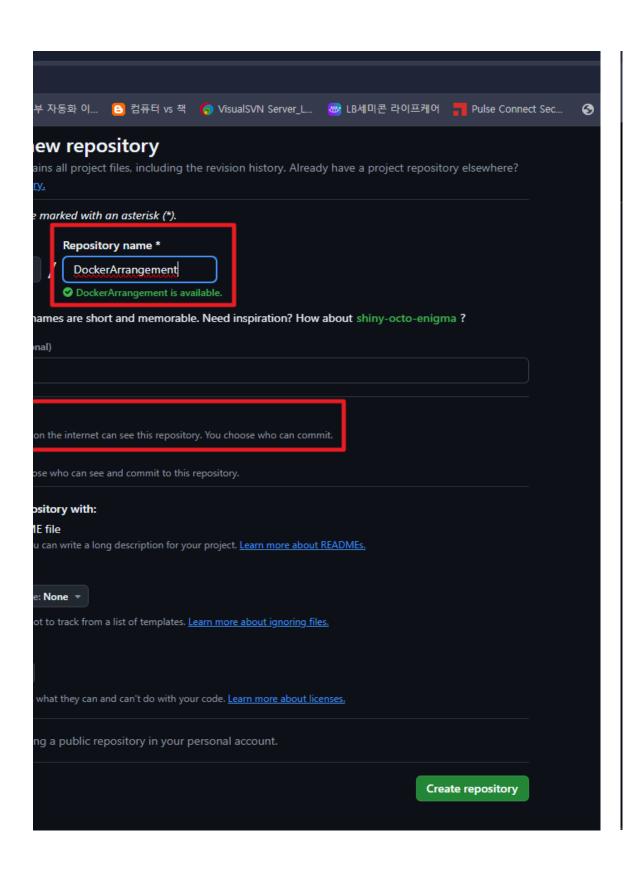


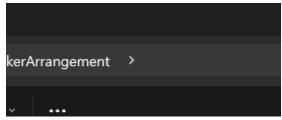


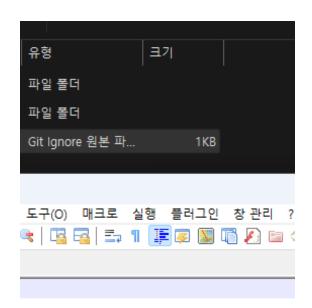
					1 -				
‡( <u>N</u> )	도구①	확장( <u>X</u> )	창( <u>W</u> )	도움말( <u>H</u> )	<i>P</i>	검색 🕶	DockerCo	nsolePractice	
actice	- D (A)	-   📠   👼	وطه 🌣 📑	┗ 俳	- <u></u> 5 <u></u>	<b>□</b> ⊲ -	<b>л Та</b> _		
		🛶   😘	- <b>-</b> ×			n n	n n <del>-</del>		
	+ 9°	DockerCor	nsolePract	ice.Program					
!로									
,									
path}	");								
");									
neter	enables	recursi	ve dele	tion					
경로									
0-									
path}	");								
");									
neter	enables	recursi	ve dele	tion					
		▼ Ţ ×	솔루션	 탐색기			<b>→</b> ‡ ×	속성	

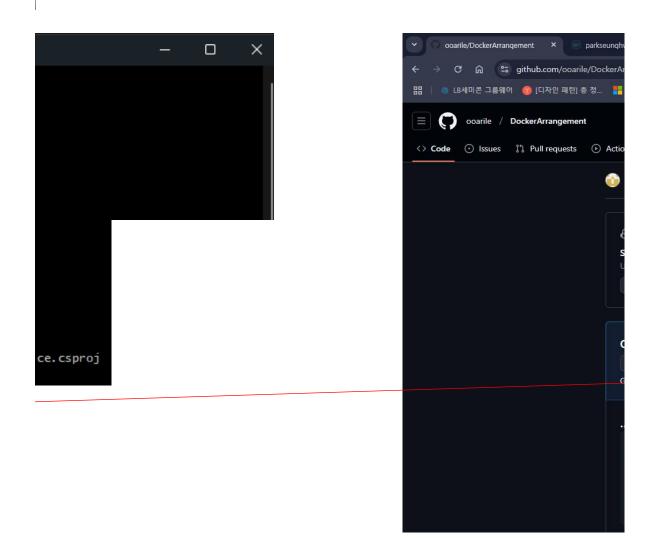


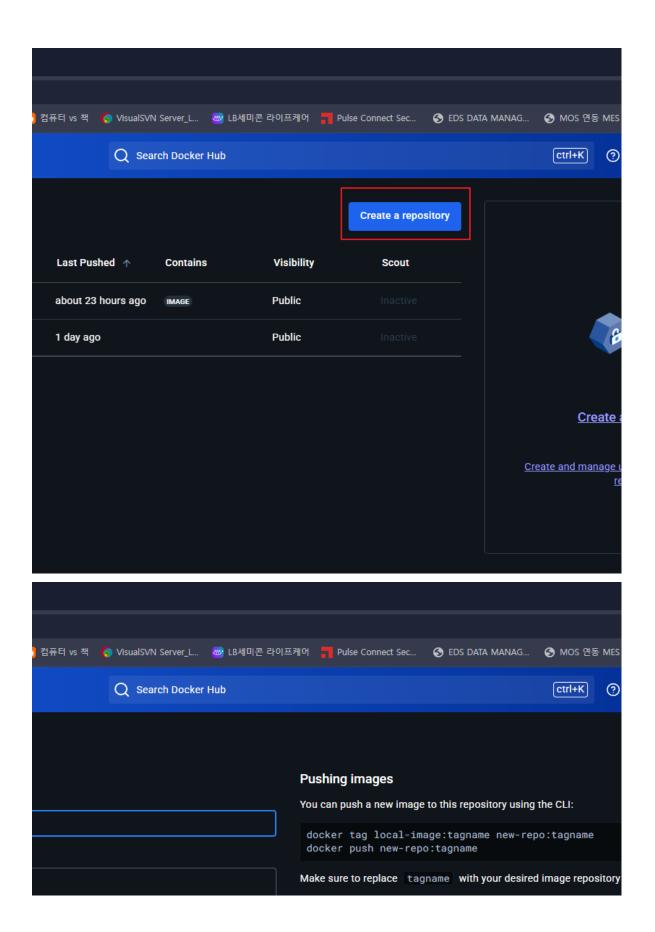








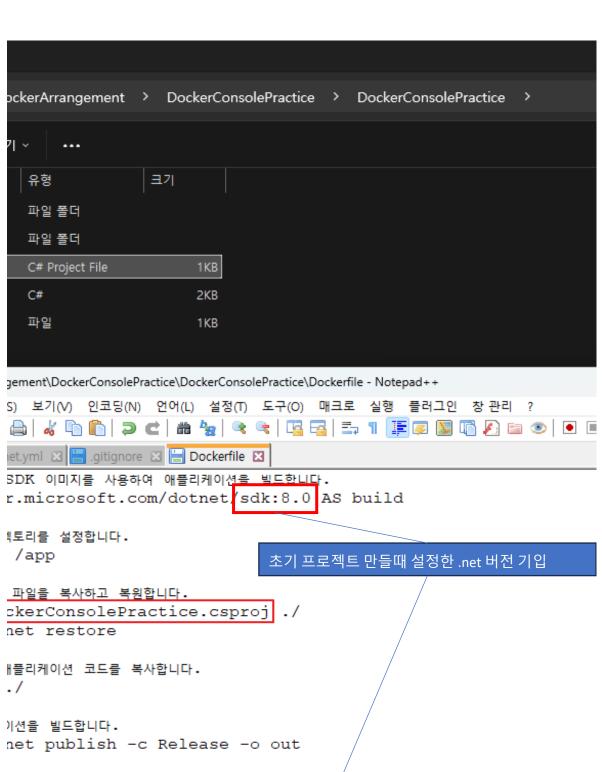




```
Hub and in search engines, and is visible to users in

Cancel

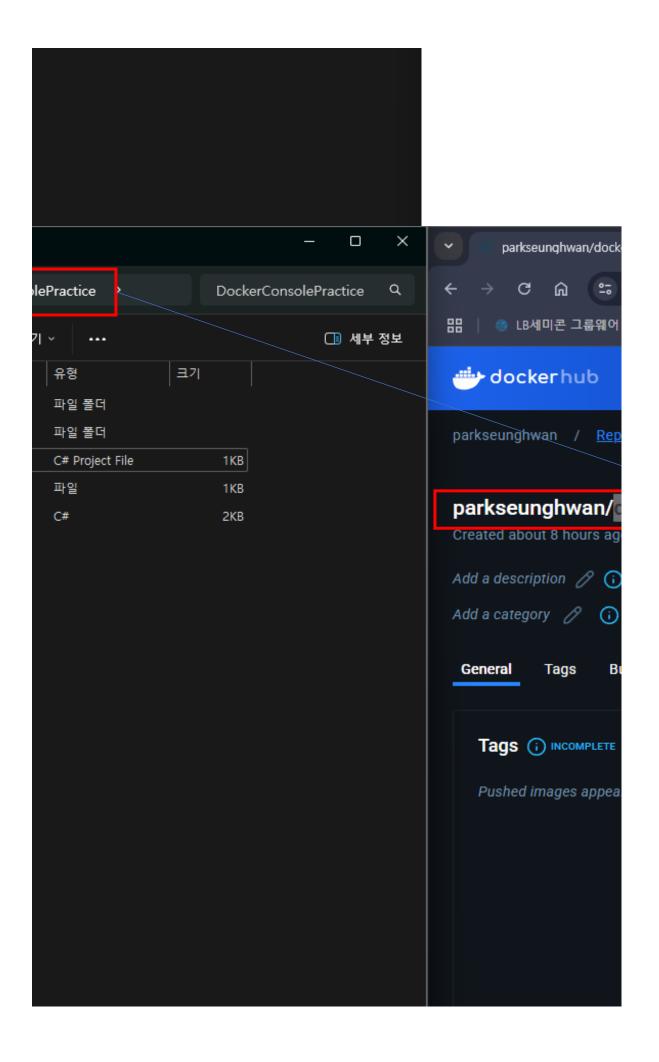
Create
```

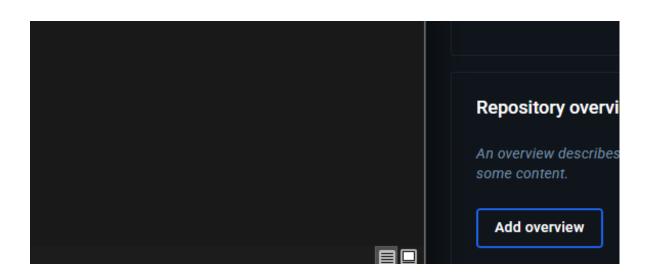


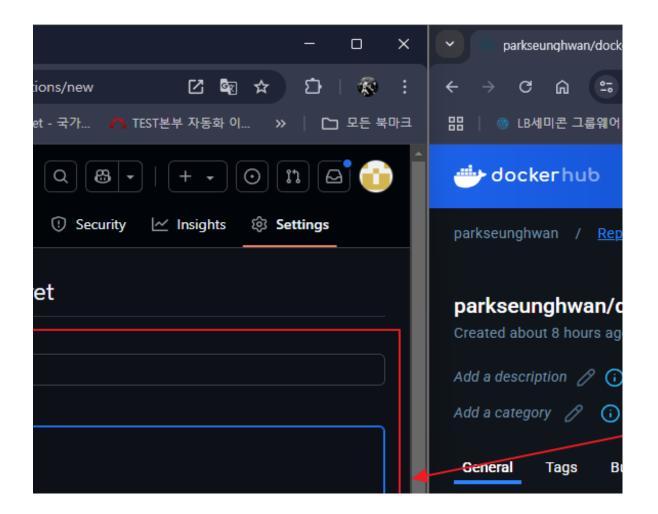
```
r.microsoft.com/dotnet/runtime: 8.0
/app
from=build /app/out .

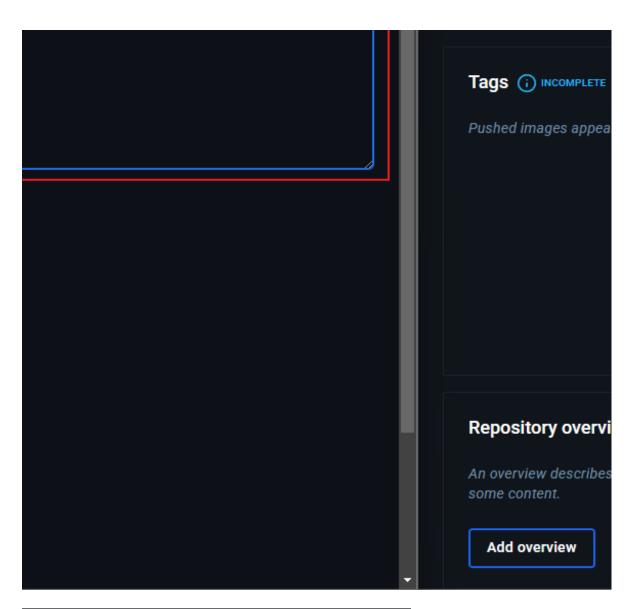
기선을 실행하는 명령어
INT ["dotnet", "DockerConsolePractice dll"]
```

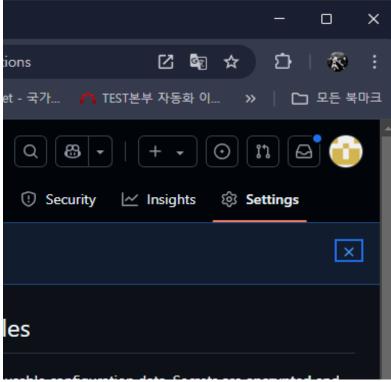






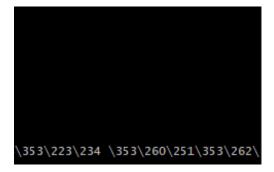


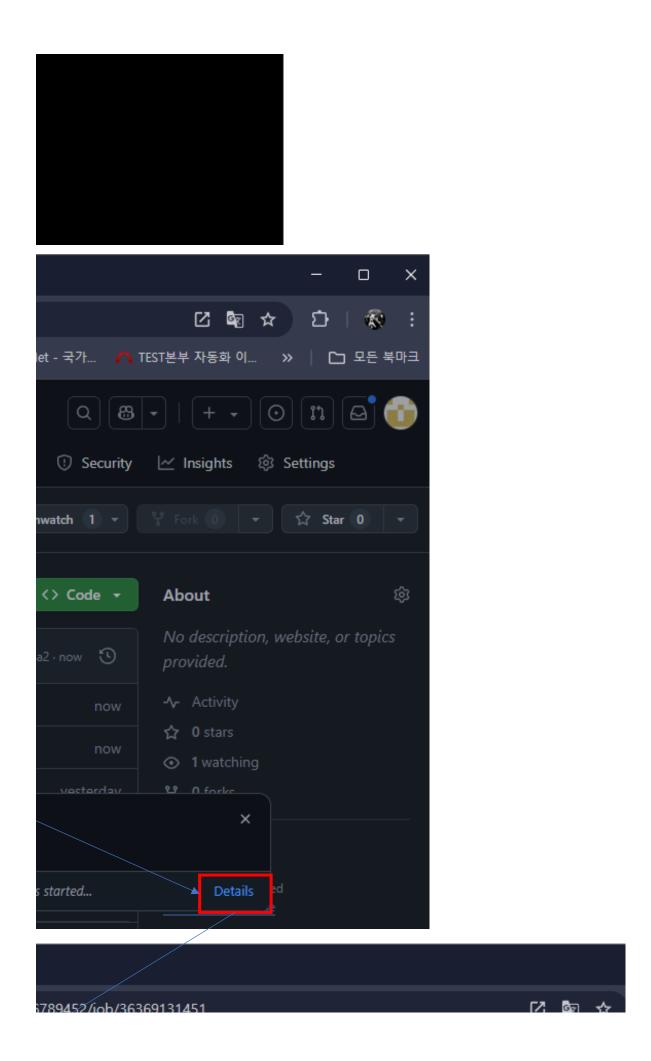


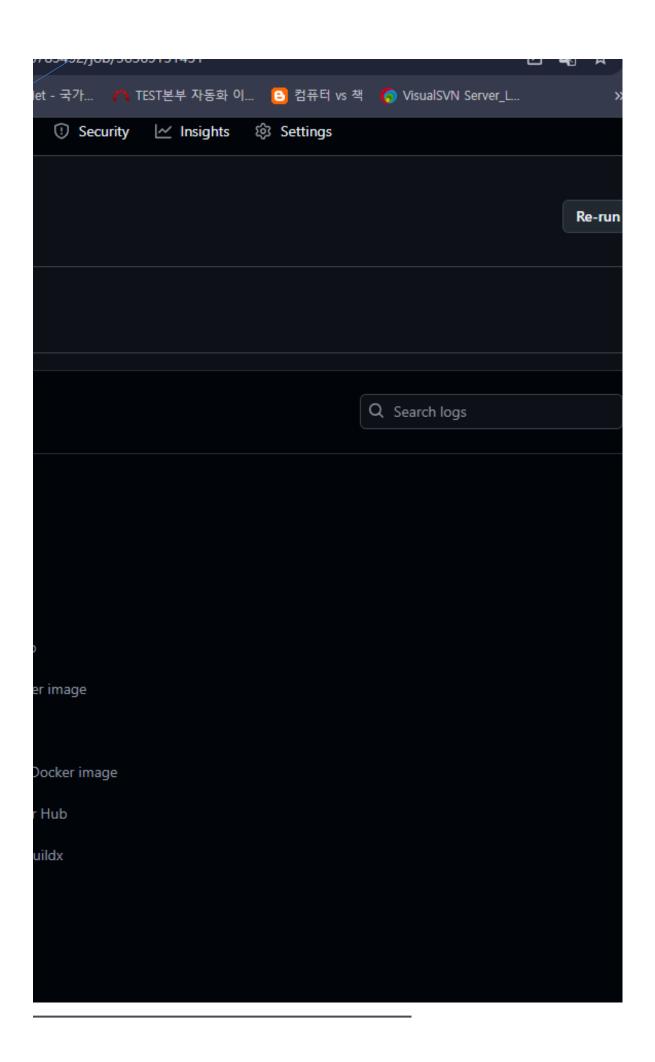


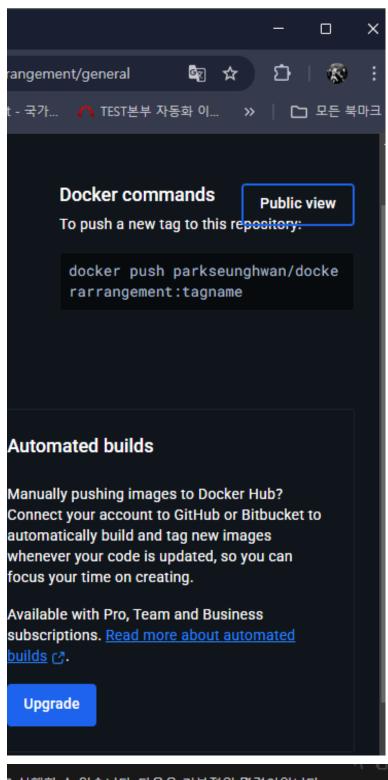
usable configuration data. Secrets are encrypted and encrypted secrets. Variables are shown as plain text ore about variables. sitory can use these secrets and variables for actions. ggered by a pull request from a fork. nment has no secrets. environment secrets **New repository secret** Last updated ů now ů 1 minute ago

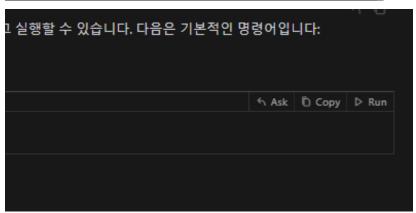
er Hub에 푸시합니다. ;니다.

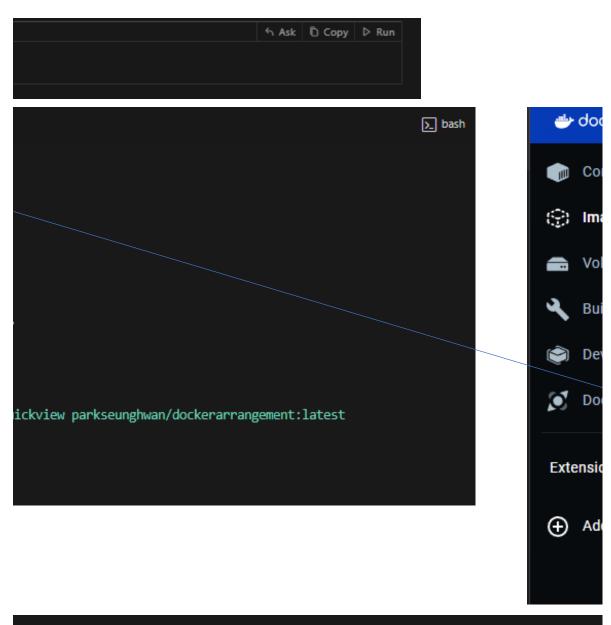


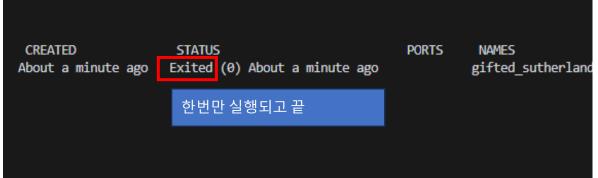




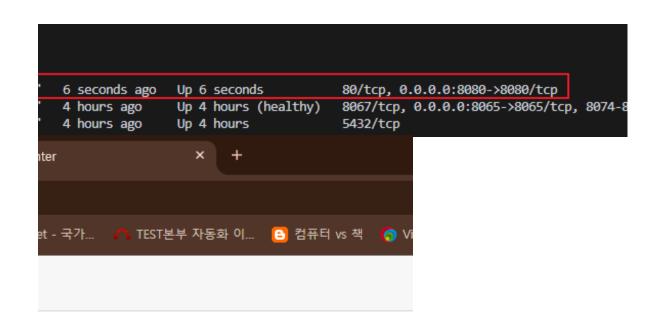


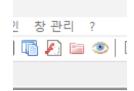






```
= X
(Ctrl+C to quit)
pp -> http://localhost:8065
90
1.15
```





of4669", 3d082e11e014d3e0cdbc942d85bf4669"

docker inspect parkseunghwan/dockerwe

네, Docker 이미지의 정보를 보면 리눅스 관련 정보

1. OS 정보:

"0s": "linux"

2. 아키텍처 정보:

"Architecture": "amd64"

3. 베이스 이미지 정보:

이 애플리케이션은 mcr.microsoft.com/dot

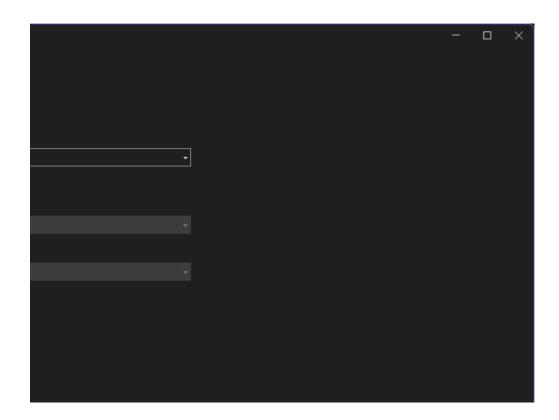
이는 Microsoft에서 제공하는 공식 .NET 8.0 런트

4. 환경 변수에서 볼 수 있는 시스템 정보:

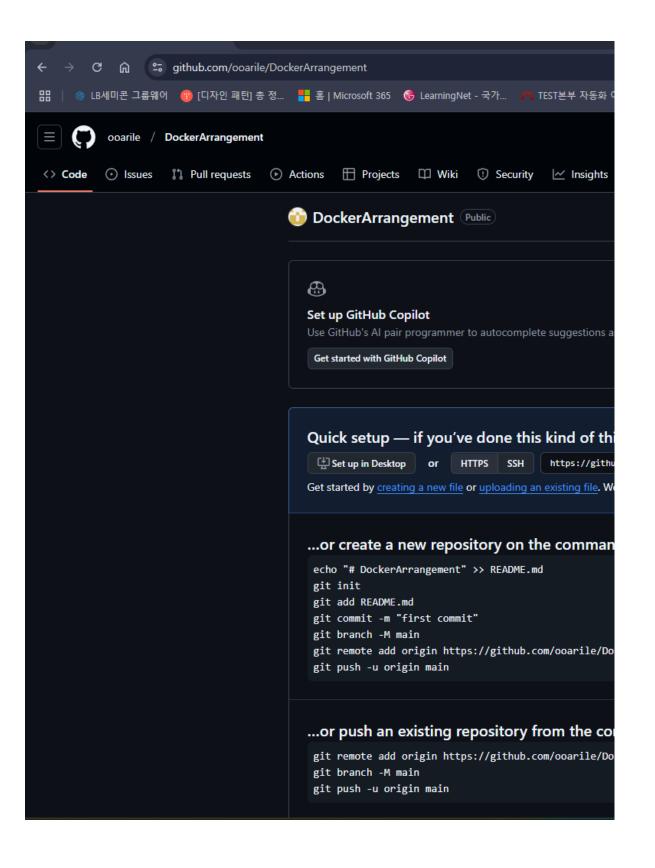
```
in",
```

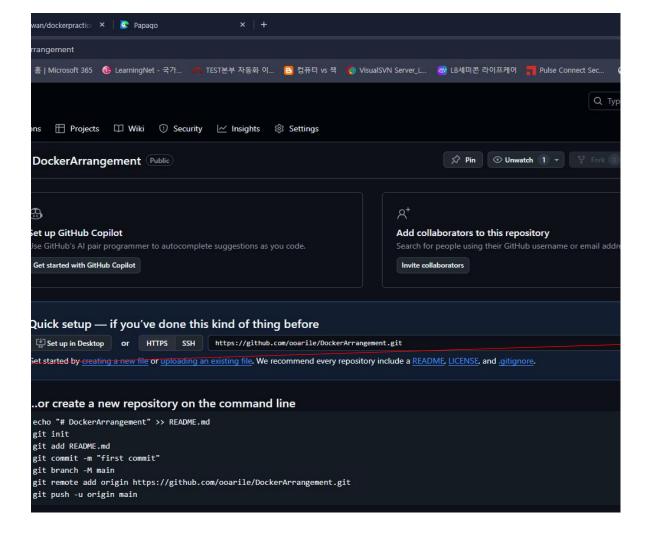
```
"Env": [
"PATH=/usr/local/sbin:/usr/local/bin:,
...
]
이 이미지는 Linux 컨테이너이며, x86_64(amd64) 역 베이스 이미지인 mcr.microsoft.com/dotnet/a
```

♪ 설정이 Windows와 다를 수 있으므로, 파일 접근 시 권한 문제를 확인해야 합니다.

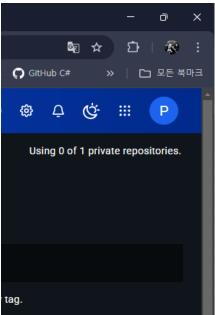












# .NET SDK 이미지를 사용하여 애플리케이션을 빌드합! FROM mcr.microsoft.com/dotnet/sdk:8.0 AS build

# 작업 디렉토리를 설정합니다. WORKDIR /app

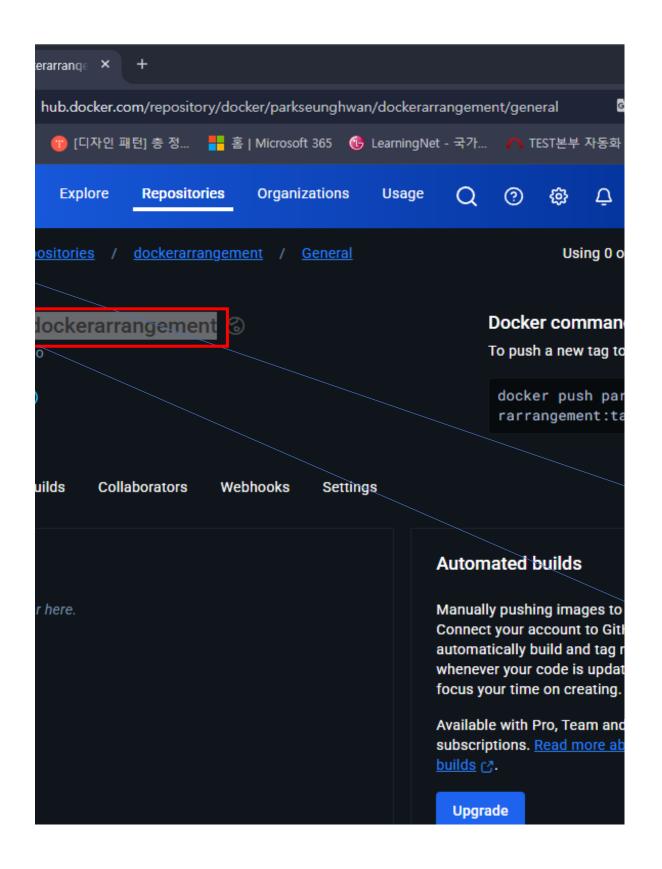
# 프로젝트 파일을 복사하고 복원합니다. COPY DockerConsolePractice.csproj ./ RUN dotnet restore

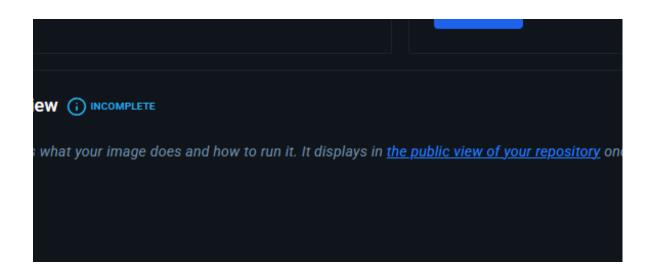
# 나머지 애플리케이션 코드를 복사합니다. COPY . ./

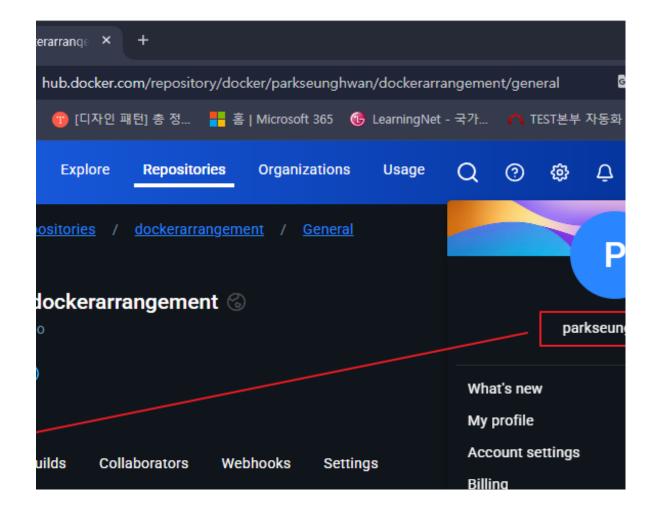
# 애플리케이션을 빌드합니다. RUN dotnet publish -c Release -o out

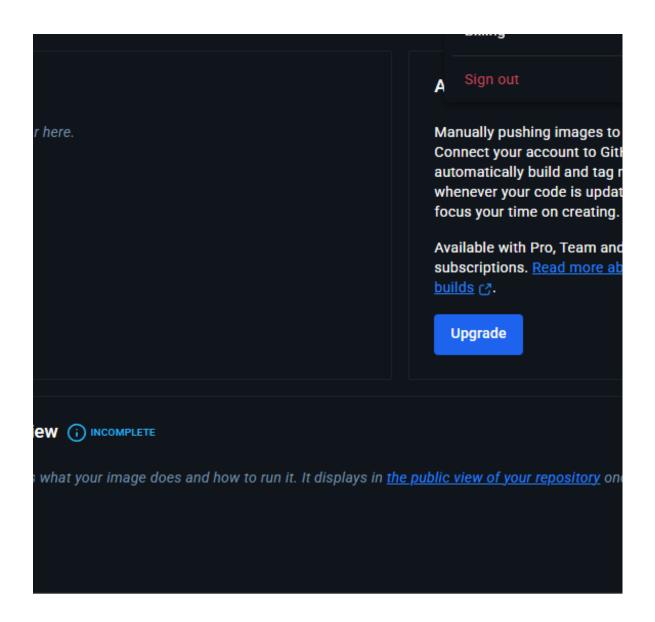
# 최종 이미지 FROM mcr.microsoft.com/dotnet/runtime:8.0 WORKDIR /app COPY --from=build /app/out .

# 애플리케이션을 실행하는 명령어 ENTRYPOINT ["dotnet", "DockerConsolePractice.dll"]



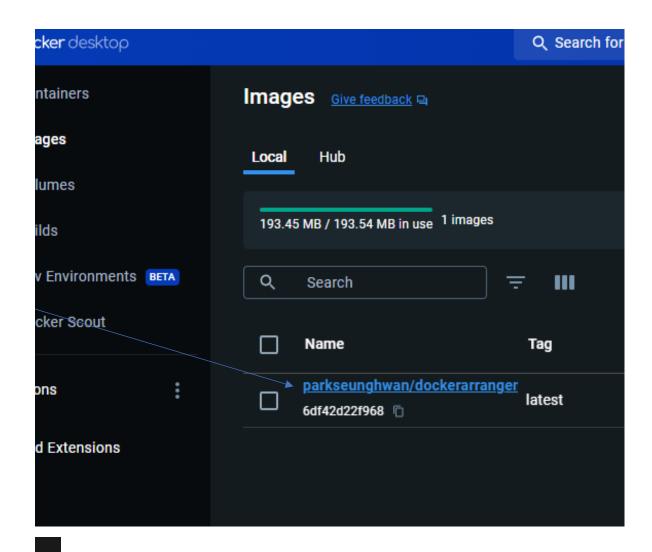












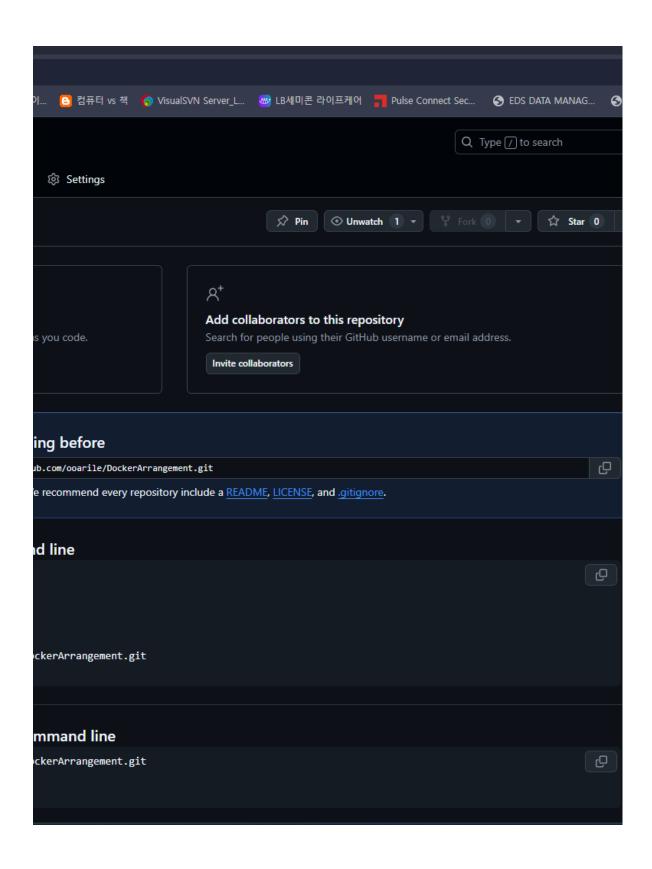
dazzling\_hodgkin 3075/tcp dockerarrangement-app-1 dockerarrangement-db-1

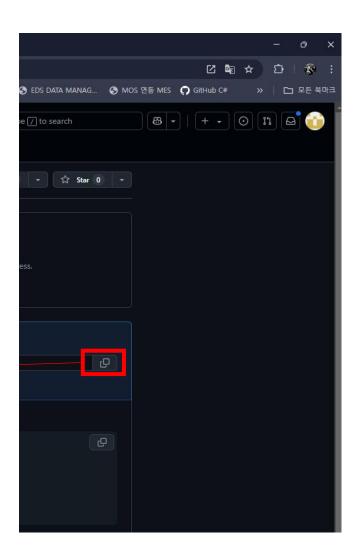
4를 확인할 수 있습니다:	
net/aspnet:8.0 를 베이스 이미지로 사용하고 있습니다.	
타임 이미지이며, Debian Linux를 기반으로 합니다.	

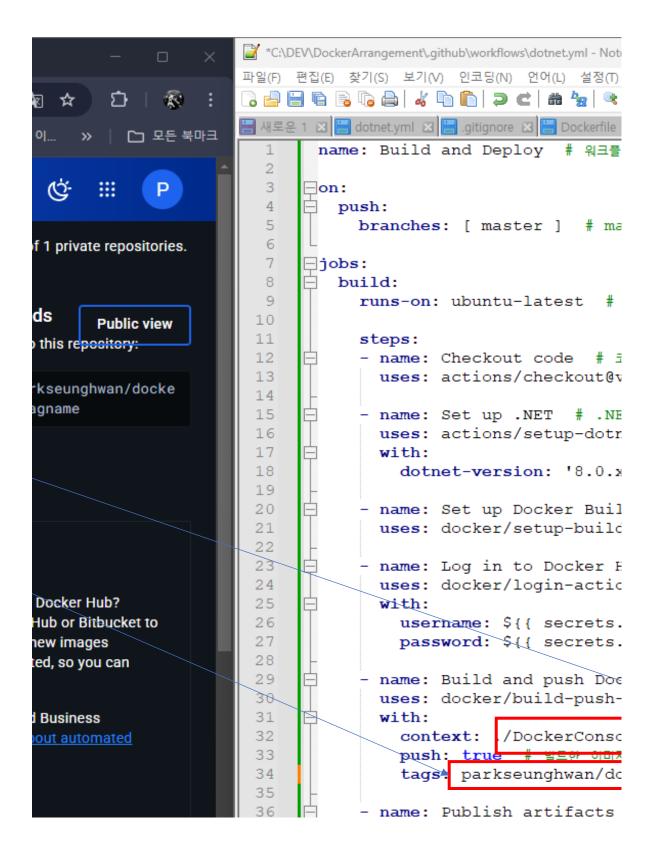
/usr/sbin:/usr/bin:/sbin:/bin",

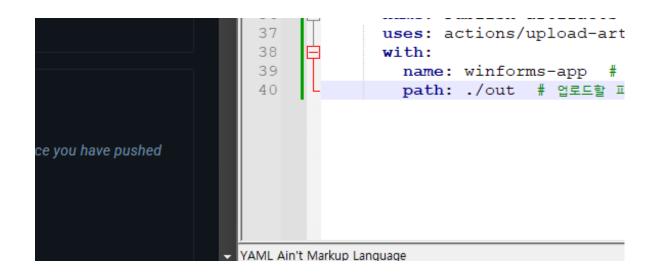
아키텍처에서 실행되도록 빌드되었습니다. 구체적인 Linux 배포판 버전은 aspnet:8.0 에 따라 결정되며, 이는 Debian Linux를 기반으로 합니다.

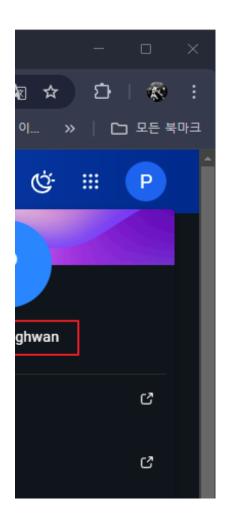




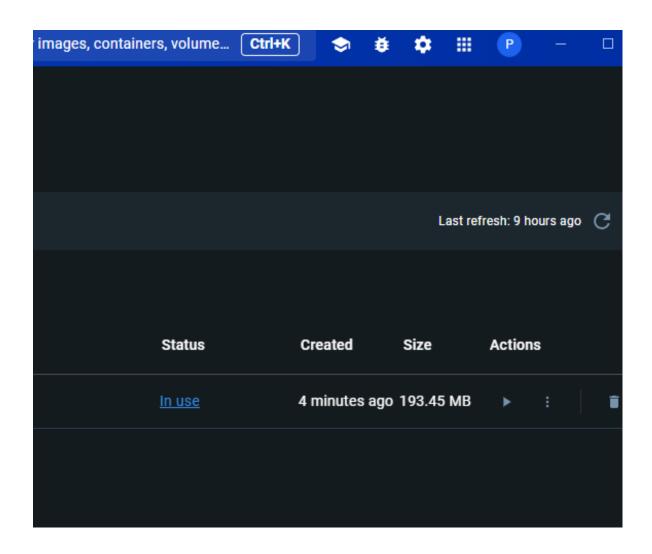








Docker Hub? Hub or Bitbucket to new images ted, so you can d Business out automated ce you have pushed



\_ <u>-</u> <u>-</u> ×



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epad++
 도구(O) 매크로 실행 플러그인 창관리 ?
👒 | 📭 🚰 | 🚍 ¶ | 👺 🐷 📓 📭 🔊 🐿 🗩 🗉 🕟
☑ 🔚 dotnet.yml 🗵 블 Dockerfile 🗵 블 test.txt 🗵
로우의 이름을 설정합니다.
aster 브랜치에 푸시될 때 워크플로우가 트리거됩니다.
워크플로우가 실행될 환경을 설정합니다. 여기서는 최신 우분투를 사용합니다.
코드를 체크아웃하는 단계입니다.
72 # GitHub Actions의 체크아웃 액션을 사용합니다.
TT 환경을 설정하는 단계입니다.
net@v2 # .NET 설정 액션을 사용합니다.
.NET 버전을 지정합니다.
ldx # Docker Buildx를 설정하는 단계입니다.
ix-action@v1 # Docker Buildx 설정 액션을 사용합니다.
Hub # Docker Hub에 로그인하는 단계입니다.
\mathtt{on@v1} # Docker 로그인 액션을 사용합니다.
.DOCKER USERNAME }} # Docker Hub 사용자 이름을 GitHub Secrets어
.DOCKER PASSWORD }} # Docker Hub 비밀번호를 GitHub Secrets에서
sker image # Docker 이미지를 빌드하고 푸시하는 단계입니다.
-action@v2 # Docker 빌드 및 푸시 액션을 사용합니다.
                                 # Docker 빌드 컨텍스트를 설정합
plePractice/DockerConsolePractice
<del>이를 Docker Hub에 무</del>시합니다.
ockerarrangement:latest # Docker 이미지에 태그를 지정합니다.
 # 빌드 산출물을 업로드하는 단계입니다.
```

업로드할 아티팩트의 이름을 지정합니다.

·일의 경로를 지정합니다.

∥서 가져옵니다. 가져옵니다.

'니다.

/indows (CR LF) UTF-