???? ?????

? ???? ?? & ?? ?? ???

?? ???? ??

- Docker □□ BookStack + MariaDB

```
□□DainWiki/
├── □□bookstack/          # BookStack □□□□ □□ □ □□□□
│     └── ...              # □□ □□□□□□ □□□□□
├── □□bookstack_db/        # MariaDB □□□
│     └── ...              # (.frm, .ibd □ DB □□□□)
├── □□certs/              # □□□□ □□□□ (□□ □□□□)
├── □□html/               # nginx □□ □□□□ □□□□
├── □□vhost.d/            # □□ □□□□ □□ (□□ □□□□)
├── □□docker-compose.yml   # □□ □□ □□
```

bookstack container

```
□□/app/www/
├── □□.env               # Laravel □□ □□
├── □□artisan            # Laravel CLI □□ □□
├── □□config/            # □ □ DB □□
│    ├── app.php
│    └── database.php □
├── □□routes/            # □ □□□□ □□
│    └── web.php □
├── □□resources/         # □ □□□□, □□ □□□□
│    ├── views/
│    └── lang/
├── □□storage/           # □□, □□□, □□ □□□□
│    ├── logs/
│    ├── app/
│    └── framework/
└── □□public/            # □ □□ □□□□□
     └── □□uploads/       # □□□□ □□□□ □□□□
```

bookstack_db container

```
□□/
├── □□var/
│   └── □□lib/
│       └── □□mysql/              # ←□ : 실제 DB 
│           ├── □□bookstack/     # BookStack□□ 사용하는 DB 
│           │   ├── users.ibd
│           │   ├── pages.ibd
│           │   └── ...
│           ├── mysql/           # 시스템 DB (사용자, )
│           ├── performance_schema/
│           └── ibdata1, ib_logfile0 □
├── □□etc/
│   └── my.cnf                   # MariaDB 설정 파일
└── □□ Linux □□ 
```

1. SSH? ??? ?? ??

Linux, macOS, WSL, □□□   □□ , VSCode □□□

```
ssh -i ~/□□□.pem ubuntu@your-lightsail-ip
```

□□□   (Windows PowerShell / CMD)

```
ssh -i "C:\Users\aweso\pem\□□□.pem" ubuntu@your-lightsail-ip
```

2. home ??

- `.yml` □□   □□
- docker □□□   □□□   □□ (docker ps, docker-compose up -d. docker-compose down □
)

```
cd DainWiki
```

3. ?? ???? ??? ????

```
docker exec -it bookstack bash
```

4. Laravel ? ??? ??

- `.env` ▯▯ ▯▯

```
docker exec -it bookstack bash
cd /app/www
ls -al .env
```

5. Laravel ?? ?? ?? ? ?????? ?? ??

- DB ▯▯ ▯▯
- DB ▯▯▯ (▯▯) ▯

```
php artisan config:clear
php artisan cache:clear
php artisan view:clear
php artisan migrate --force
```

6. maria db ??? ?? ?

```
docker exec -it bookstack_db bash ▯▯▯ ▯▯
mysql -u root -p
▯▯ rootpassword


▯▯▯▯▯
Welcome to the MariaDB monitor...
MariaDB [(none)]>
```

7. ?? ??? ?? ??

```
df -h
```

#1. ?? ???? ?? ?????? ?? SSL ?? ?? ?

?? ??

- (Docker ▢▢▢▢ AWS Lightsail▢▢ ▢▢▢▢ ▢▢▢▢)
- HTTPS▢ ▢▢▢ ▢▢▢▢▢▢ '▢▢ ▢▢ '▢ ▢▢▢▢ ▢▢

? ?? ??

- SSL ▢▢▢ ▢▢

? ????

- ▢▢ docker-compose.yml ▢▢▢ ▢▢ 2▢▢ Docker ▢▢▢▢ ▢▢▢▢ SSL ▢▢ ▢▢
  Nginx reverse proxy (jwilder/nginx-proxy),
  Let's Encrypt companion (JrCs/letsencrypt-nginx-proxy-companion)

▢▢ ▢▢

```
▢▢DainWiki/
├── ▢▢bookstack/
├── ▢▢bookstack_db/
├── docker-compose.yml
```

yml ▢▢ ▢▢ ▢

```
▢▢DainWiki/
├── ▢▢bookstack/        # BookStack ▢▢▢▢ ▢▢ ▢ ▢▢▢
├── ▢▢bookstack_db/     # MariaDB ▢▢▢
├── ▢▢certs/            # ▢▢▢ ▢▢▢ (▢▢ ▢▢▢)
├── ▢▢html/             # nginx ▢▢ ▢▢▢ ▢▢▢
├── ▢▢vhost.d/          # ▢▢ ▢▢▢ ▢▢ (▢▢ ▢▢▢)
```

```
├── docker-compose.yml    # □□ □□ □□
```

```
ubuntu@ip-172-26-5-34:~/DainWiki$ docker ps
CONTAINER ID   IMAGE                                    COMMAND                  CREATED         STATUS
                                                                    NAMES
d25363af4d9b   lscr.io/linuxserver/bookstack:latest     "/init"                  6 minutes ago   Up 6 minutes
443/tcp                                                             bookstack
e3662714bf27   jrcs/letsencrypt-nginx-proxy-companion   "/bin/bash /app/entr…"   6 minutes ago   Up 6 minutes
                                                                    letsencrypt
fa3cf91211e6   jwilder/nginx-proxy                      "/app/docker-entrypo…"   6 minutes ago   Up 6 minutes
:80->80/tcp, :::80->80/tcp, 0.0.0.0:443->443/tcp, :::443->443/tcp   nginx-proxy
613018760a99   mariadb:10.4                             "docker-entrypoint.s…"   6 minutes ago   Up 6 minutes
p                                                                   bookstack_db
```

□□ ① Let's Encrypt □□□   □□□   □□

```
service:
 - VIRTUAL_HOST=dainwiki.com
 - LETSENCRYPT_HOST=dainwiki.com
 - LETSENCRYPT_EMAIL=your@email.com
```

□□ ② APP_URL □ http → https□ □□□

```
-        - APP_URL=http://dainwiki.com
+        - APP_URL=https://dainwiki.com
```

→ □□□□   □□□□   https □□□   □□□□   □□ .

□□ ③ nginx-proxy □ letsencrypt □□□□   □□

```
nginx-proxy:
    image: jwilder/nginx-proxy
    container_name: nginx-proxy
    restart: always
    ports:
      - "80:80"
      - "443:443"
    volumes:
      - /var/run/docker.sock:/tmp/docker.sock:ro
      - ./certs:/etc/nginx/certs
      - ./vhost.d:/etc/nginx/vhost.d
      - ./html:/usr/share/nginx/html
    networks:
      - bookstack_net
```

```yaml
  letsencrypt:
    image: jrcs/letsencrypt-nginx-proxy-companion
    container_name: letsencrypt
    restart: always
    environment:
      - NGINX_PROXY_CONTAINER=nginx-proxy
      - DEFAULT_EMAIL=your@email.com
    volumes:
      - /var/run/docker.sock:/var/run/docker.sock:ro
      - ./certs:/etc/nginx/certs
      - ./vhost.d:/etc/nginx/vhost.d
      - ./html:/usr/share/nginx/html
    depends_on:
      - nginx-proxy
    networks:
      - bookstack_net
```

→ 🔒 🔑 + SSL 🔐 🔓

#2. www ??? 503 ???? ??

?? ??

- □□□ : https://dainwiki.com, http://dainwiki.com□ □□ □□□
- http://www.dainwiki.com, https://www.dainwiki.com □□ □□ □□
- DNS □□□ □□ (A□□□ □□□□ @□ www(□□)□□ □□ □□□□ □□)

503 Service Temporarily Unavailable

nginx

⌄ ⓘ	호스트	값/위치	TTL		⌄	상태
A	www	43.202.6.70	1800		DNS 설정	
A	@	43.202.6.70	1800		DNS 설정	

? ?? ??

- Docker □□□□ nginx-proxy + letsencrypt-nginx-proxy-companion □□□ □□ □
- .env □□ docker-compose.yml □□□ www.dainwiki.com□ □□□□ □□ □□□
- □□□□ www.dainwiki.com□ □□□□ www □□ □□ □□ □□□□ □□□□ □□

? ????

- Docker □□□□ nginx-proxy + letsencrypt-nginx-proxy-companion □□□ □□ □
- .env □□ docker-compose.yml □□ □ □□□□ □□□ □□ □□

```
VIRTUAL_HOST=dainwiki.com,www.dainwiki.com
LETSENCRYPT_HOST=dainwiki.com,www.dainwiki.com
LETSENCRYPT_EMAIL=you@example.com
```

□□ □□□ □□ □□□□ □□□

```
docker-compose down
docker-compose up -d
```

▢ □□□ □□

- www.dainwiki.com□ □□□ SSL □□□□ □□ □□□
- www □□ □ https:// □ □□ □□□□

#3. DB ??? & ??? ?? ?????

?? ??

- □□□□ BookStack API □□ □□ □□ □□□□ ((Apache + PHP + MySQL) □□ □ DB □□□ □□
- 503 □□ □□□□ □□□□ □□□□ □ □□ □□□□ □□ □□ □□□ □□ □□□□

? ?? ??

- MySQL □□□ □□ □□□ htdocs □□□ □□ □□□ □□□
- □□ □□□ □□ □ □□ □□□□ □□□ □ □□
- □□ □□□ □□ (volume, data □□□□) □□

? ?? ??

- □□ : AWS Lightsail□ □□ , Docker + Volume □□□□ □□□ □□ □□
- □□ : docker-compose up -d□ □□ □□ □□ , □□□□ □□□□ volume: □ □□□
- □□ □□ :
  □□ □□ 60GB □□□ □□ □□□□ □□□□□ □□ □□□ □□ □□
  □□ `mysqldump` □□ □□ □□ □□□□ □□ □□
- □□□ : AWS Lightsail $10 □□ (2GB RAM, vCPU 1, SSD 60GB)

□□ □□ □□

```
□□DainWiki/
├── □□bookstack/        # BookStack □ □□, □□□
├── □□bookstack_db/     # MariaDB □□□□ (□□ □□□, □□ □)
├── □□docker-compose.yml
└── □□.env
```

□ yml. □□ □□□ □□ □□

```
bookstack:
  volumes:
    - ./bookstack_data:/config


bookstack_db:
  volumes:
    - ./db_data:/var/lib/mysql
```

□□□ □□ □□ (bind mount)□□□ □□□ .

- □□ □□ (./bookstack_data)□ □□□□ □ □□□□ (/config)□ □□
- □□ □□□□ □□□ (=Lightsail □□□□)□□□□ □□□ □□□ .
- □,□□ □□□ (/) □□ ~/DainWiki/bookstack_data, db_data □ (□:
  /home/ubuntu/DainWiki/bookstack_data)

□ □□ □□□ □□ □□ □□

```
docker inspect bookstack
```

- □□□ Mounts □□ □□

□ □□ □□ □□

```
df -h
```

#4. ??? ?? ??? ???? ?? ??

?? ??

- https://www.dainwiki.com ?? ? ?? ?? ??
- www ???? ?? ? yml ?? ?? ?? → www? ???? ???? ?? ?? ?
- docker logs letsencrypt?? ?? ?? ?? ???? ???? , ?? ???? ??

? ?? ??

- ?? .env?? LETSENCRYPT_HOST ? VIRTUAL_HOST? ???? ???? ?? (www.dainwiki.com ??)
- ?? ??? ?? ?? ???? ,
- Let's Encrypt Companion ???? ?? ?? /???? ?? ??
- ?? ?? ?? ?? ?? ??? ???? ???? ??
- ?? ???? ?? ? 5? ?? ?? ??

? ?? ??

SSL ??? ?? ?? ??

```
docker logs letsencrypt
```

```
Reloading nginx proxy (nginx-proxy)...
2025/05/18 04:30:43 Generated '/etc/nginx/conf.d/default.conf' from 4 containers
2025/05/18 04:30:43 [warn] 63#63: "ssl_stapling" ignored, no OCSP responder URL in the certificate "/etc/nginx/certs/www.dainwiki.com.crt"
2025/05/18 04:30:43 [notice] 63#63: signal process started
Reloading nginx proxy (nginx-proxy)...
2025/05/18 04:30:43 Contents of /etc/nginx/conf.d/default.conf did not change. Skipping notification ''
2025/05/18 04:30:43 [warn] 77#77: "ssl_stapling" ignored, no OCSP responder URL in the certificate "/etc/nginx/certs/www.dainwiki.com.crt"
2025/05/18 04:30:43 [notice] 77#77: signal process started
```

?? ???? ??

```
docker exer -it nginx-proxy sh
```

```
docker exer -it nginx-proxy bash
```

```
ls /etc/nginx/certs/
```

- dainwiki.com/, www.dainwiki.com/ □□□   □□   □□□
- □ □□   fullchain.pem, cert.pem, key.pem □□   □□□□

```
ubuntu@ip-172-26-5-34:~/DainWiki$ docker exec -it nginx-proxy bash
root@c44cb4cfd4ae:/app# ls /etc/nginx/certs/
dainwiki.com              dainwiki.com.dhparam.pem   www.dainwiki.com.chain.pem    www.dainwiki.com.key
dainwiki.com.chain.pem    dainwiki.com.key           www.dainwiki.com.crt
dainwiki.com.crt          dhparam.pem                www.dainwiki.com.dhparam.pem
```

#5. Git? READ.md ??? ??? ???? ?? push ?? ??

?? ??

- GitHub□ □□ README.md□ □□ , □□□ Git □□□□ □□ □□ □□ □□ git push □□□ □□ .
- GitHub□□ □□ pull □□□ □ □□□ □□ □□ □□□□ → push□□ □□ .
- □ □ git pull --rebase □ □□□□ □□

? ?? ??

□□	□□ □□	□□ □ □□ □□
`git pull origin main --allow-unrelated-histories`	□ □□ 1□□	□□ □□ □□ □ Git □□□□□ □□□ □□
`git pull origin main --rebase`	□ □□ □□ (□□□□)	□□ □□□ □□□ rebase □□□ → □ □□□□ □□□

□□ 1□□ pull □ □ --allow-unrelated-histories□ □□ □□ .

□ □□□□ '□□ □□ '□ □□ □□□ Git□ □□ □□□ □□□ □□□□ □□□ --rebase□ □ □ □□ .

--allow-unrelated-histories□ □□ □□ □□□ □□ □□ □ □□□□ □□□ □□ □□□□ □□□ □ □ □□ □□ ,

□□□ □□□ X → A → B → C □□ □□ □□□ □□□□ □□ □ □□□□□ □□□ □□ .

? ?? ??

```
# 1. □□ □□□ □□
git remote add origin https://github.com/□□□□/□□□□.git


# 2. □□ □□□□ □□□□ □□ □□□□
git pull origin main --allow-unrelated-histories
```

```
# 3. □□ □□□ □□ □ □□


# 4. □□ □□□□□ □□ □□
git push origin main
```

□□□□□   git pull □□ git pull --rebase □□ .

- git pull --rebase origin main → □□□ □□□□ □□ □
- git pull origin main → □□□ □□□ □□ □

#6. The current branch master has no upstream branch. ??

?? ??

- Git Bash □□ □□ □□ □ □□□ □□ □□ □□□

> **The current branch master has no upstream branch.**
>
> $ git push fatal: The current branch master has no upstream branch. To push the current branch and set the remote as upstream, use git push --set-upstream origin master To have this happen automatically for branches without a tracking upstream, see 'push.autoSetupRemote' in 'git help config'.

? ?? ??

- □□ □□ □□□ (master)□ □□ □□□□ □□□□ □□
- master□ □□ □□□□ □□□ --set-upstream□□ □□□□ □□□
- main□□ □□□ □□□ □□□□ □□□□ .

? ?? ??

- master □□□□ main □□□□ □□□ □□□□ .
- □ □□□ □□ + GitHub(□□ origin) □□□□ □□□ □□□ □□□□ □□□□ .

```
git branch -m master main
git push -u origin main
# (GitHub□□ default branch □□ □□)
git push origin --delete master   # (□□)
```

1. □□ □□□ □□ □□□□ □

```
git branch -m master main
```

- -m = move (rename)

2. 원격 (origin)

```
git push -u origin main
```

- -u로 main upstream으로 설정

3. GitHub에서 기본 브랜치를 main으로 변경

1. GitHub 저장소 →
2. Settings → Branches
3. Default branch를 master → main으로 변경

4. 기존 master 브랜치 삭제

```
git push origin --delete master
```


현재 master --set-upstream .

```
git push --set-upstream origin master
```

 origin/master master 브랜치를 원격 (origin).

 master , ,

 git push, git pull을 통해 origin/master.