

포팅 메뉴얼

작성해야 하는거

ci/cd

Swagger:	http://3.36.125.122:8082/swagger-ui/index.html
jenkins	http://3.36.125.122:8080/ id :wonik pw:
mariaDB	server root 비밀번호 : 1234 hostname : 54.180.202.20 port : 3306 user : ssafy 비밀번호 : ssafy1111
mongoDB	compass 연결 uri : mongodb://ssafy:ssafy1111@3.36.125.122:27017/?authMechanism=DEFAULT&authSource=admin port : 27017 user : ssafy pwd: ssafy1111
aws S3 Object Storage	ID : S101SSAFY@gmail.com pw : Ssafy101!
S3 IAM	ID: Administrator PW: ssafy1111@ access key : AKIA5Z3I5G4VISKY7QLC secret access key : Z6cCCb7t1dSmmk7d1jdgdnBR76X7NODo4fEr1b

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1. 사용 도구

- 이슈 관리 : Jira
- 형상 관리 : GitLab
- 커뮤니케이션 : Notion, MatterMost
- 디자인 : Figma
- CI/CD : Jenkins

2. 개발 도구

- Visual Studio Code : 1.76.0
- IntelliJ : 2022.3.2 (Ultimate Edition)
- Terminus

3. 개발 환경

▼ 상세 내용

Frontend

Node.js	18.13.0
React	18.2.0
Redux	8.0.5
Axios	1.3.6
Apexcharts	3.39.0
Echarts	5.4.2
Jwt-decode	3.1.2

Backend

Java	openjdk version "11.0.18" 2023-01-17 LTS
Spring Boot	2.7.9
Python	3.8.12
Pandas	1.3.4
Numpy	1.20.3
Torch	1.12.0

Server

AWS S3	
AWS EC2	CPU : Intel(R) Xeon(R) CPU E5-2686 v4 @ 2.30GHz RAM : 15GB OS : Ubuntu

Service

MongDB	6.0.5
NginX	1.18.0
Jenkins	2.387.2
Docker	23.0.4
Ubuntu	Ubuntu 20.04 LTS

4. 환경변수 형태(추후 변경)

- Backend

▼ application.yml

```
spring:
  mvc:
    pathmatch:
      matching-strategy: ant_path_matcher

  data:
    mongodb:
      uri: mongodb://ssafy:ssafy1111@3.36.125.122:27017/admin?authMechanism=SCRAM-SHA-256&authSource=admin
      database: admin

  jpa:
    defer-datasource-initialization: true

  hibernate:
    ddl-auto: update
    show-sql: true

  jwt:
    token:
      secret: VlwEyVBsYt9V7zq57TejMnVUyzblYcfPQye08f7MGVA9XkHa

  cors:
    allowed-origins:
      - 'http://localhost:3000'
      - 'http://k8s101.p.ssafy.io:3000'
      - 'http://3.36.125.122:3000'
      - 'https://k8s101.p.ssafy.io'
    allowed-methods: GET,POST,PUT,DELETE,OPTIONS
    allowed-headers: '*'
    max-age: 3600

  server:
    servlet:
      context-path: /be
    ssl:
      enabled: false
    port: 8080
```

5. CI/CD 구축

MongoDB

▼ 상세 내용

몽고 죽으면 conf 파일 다시 설정

```
chown -R mongodb:mongodb /var/lib/mongodb
chown mongodb:mongodb /tmp/mongodb-27017.sock
```

Jenkins

▼ 상세 내용

▼ BE

▼ Jenkins 설정

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/93ce2c87-306b-42a0-a96c-7a15819ce210/be_manual.pdf

▼ Dockerfile

```
FROM openjdk:11-jdkARG JAR_FILE=build/libs/*.jarCOPY ${JAR_FILE} app.jarENTRYPOINT ["java","-jar","/app.jar"]
```

▼ FE

▼ Jenkins 설정

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/1e02b304-ec91-4967-8382-3a560fe0a02d/fe_manual.pdf

▼ Dockerfile

```
FROM nginx:latest
COPY ./usr/share/nginx/html
```

▼ Nginx

▼ nginx.conf

```
user www-data;
worker_processes auto;
pid /run/nginx.pid;
include /etc/nginx/modules-enabled/*.conf;
events {
worker_connections 768;
multi_accept on;
}
http {
##
# Basic Settings
##

sendfile on;
tcp_nopush on;
tcp_nodelay on;
keepalive_timeout 65;
types_hash_max_size 2048;
# server_tokens off;

# server_names_hash_bucket_size 64;
# server_name_in_redirect off;

include /etc/nginx/mime.types;
default_type application/octet-stream;

##
# SSL Settings
##

ssl_protocols TLSv1 TLSv1.1 TLSv1.2 TLSv1.3; # Dropping SSLv3, ref: P00DLE
ssl_prefer_server_ciphers on;

##
# Logging Settings
##

access_log /var/log/nginx/access.log;
error_log /var/log/nginx/error.log;

##
# Gzip Settings
##

gzip on;

# gzip_vary on;
# gzip_proxied any;
# gzip_comp_level 6;
# gzip_buffers 16 8k;
# gzip_http_version 1.1;
# gzip_types text/plain text/css application/json application/javascript text/xml application/xml application/xml+rss
##

# Virtual Host Configs
##

include /etc/nginx/conf.d/*.conf;
include /etc/nginx/sites-enabled/*;
```

```

        proxy_request_buffering off;
    }
    #mail {
    # See sample authentication script at:
    # http://wiki.nginx.org/ImapAuthenticateWithApachePhpScript
    # auth_http localhost/auth.php;
    # pop3_capabilities "TOP" "USER";
    # imap_capabilities "IMAP4rev1" "UIDPLUS";
    server {
        listen localhost:110;
        protocol pop3;
        proxy on;
    }
    server {
        listen localhost:143;
        protocol imap;
        proxy on;
    }
    #}

```

▼ conf.d

```

server {
    location / {
        proxy_pass <http://localhost:3000>;
        proxy_request_buffering off;
        proxy_buffering off;
    }

    location /be {
        proxy_pass <http://localhost:8082/be>;
        proxy_request_buffering off;
        proxy_buffering off;
    }

    location /Admin {
        try_files $uri $uri/ /index.html;
        root /usr/share/nginx/html;
        index index.html;
    }

    listen [::]:443 ssl ipv6only=on; # managed by Certbot
    listen 443 ssl; # managed by Certbot

    ssl_certificate /etc/letsencrypt/live/k8s101.p.ssafy.io/fullchain.pem; # managed by Certbot
    ssl_certificate_key /etc/letsencrypt/live/k8s101.p.ssafy.io/privkey.pem; # managed by Certbot
    }
    server {
        if ($host = k8s101.p.ssafy.io) {
            return 301 https://$host$request_uri;
        } # managed by Certbot

        server_name k8s101.p.ssafy.io;
        return 404; # managed by Certbot
    }
}

```

원격 서버 접속 후 감지시스템

▼ 상세 내용

`docker run -p 8282:22 --name test -d test`

컨테이너 시작 후

`sudo apt-get update`

`sudo apt-get install openssh-server`

`vim /etc/ssh/sshd_config`

ListenAddress 열기

PermitRootLogin yes 로 바꾸기

재시작

```
#Port 22
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::

#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
#HostKey /etc/ssh/ssh_host_ed25519_key

# Ciphers and keying
#RekeyLimit default none

# Logging
#SyslogFacility AUTH
#LogLevel INFO

# Authentication:

#LoginGraceTime 2m
PermitRootLogin yes
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10
```

ssh root@3.36.125.122 -p 8282

passwd root

service ssh start

apt install inotify-tools

파이썬 백그라운드 실행

nohup python filename.py &

tail -f nohup.out (로그확인)

ps -ef | grep filename.py(백그라운드 작업 확인 가능)

kill {your ProcessId}(백그라운드 작업 중지)

Nginx

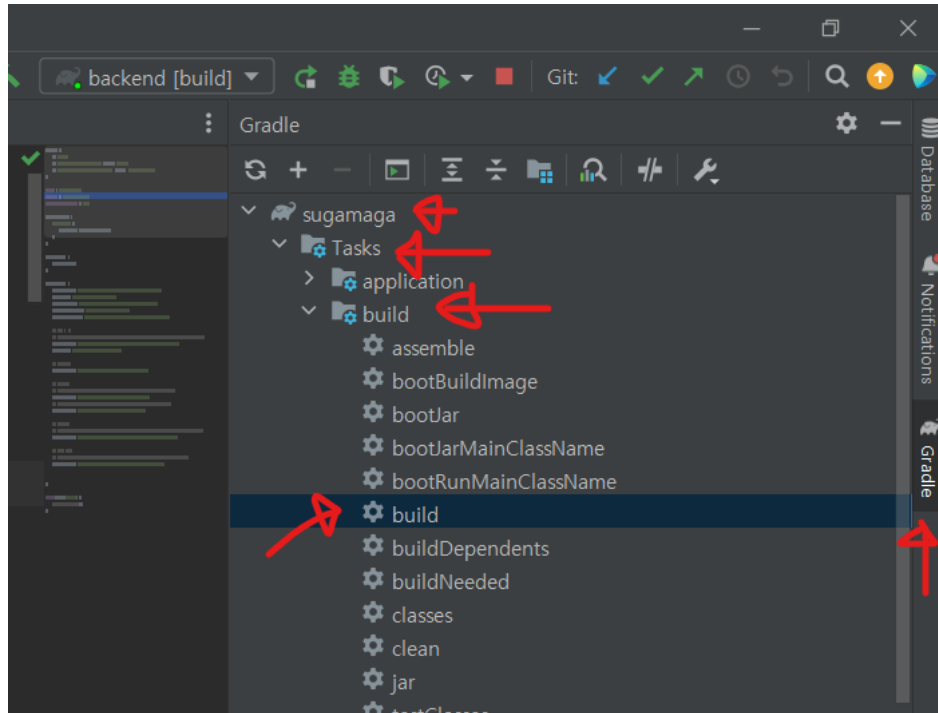
- [링크](#)

6. 빌드 및 실행

- ▼ 상세 내용

Spring Boot

- IntelliJ → Gradle → [프로젝트 명] → Task → build → build 더블클릭



- ~\backend\build\libs에서 터미널 실행
- 터미널에서 `java -jar sugamaga-0.0.1-SNAPSHOT.jar` 입력하여 실행

React

-

7. 외부 서비스 사용

▼ BE

▼ Jenkins 설정

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▼ Dockerfile

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▼ Dockerfile

```
FROM nginx:latest
COPY . /usr/share/nginx/html
```