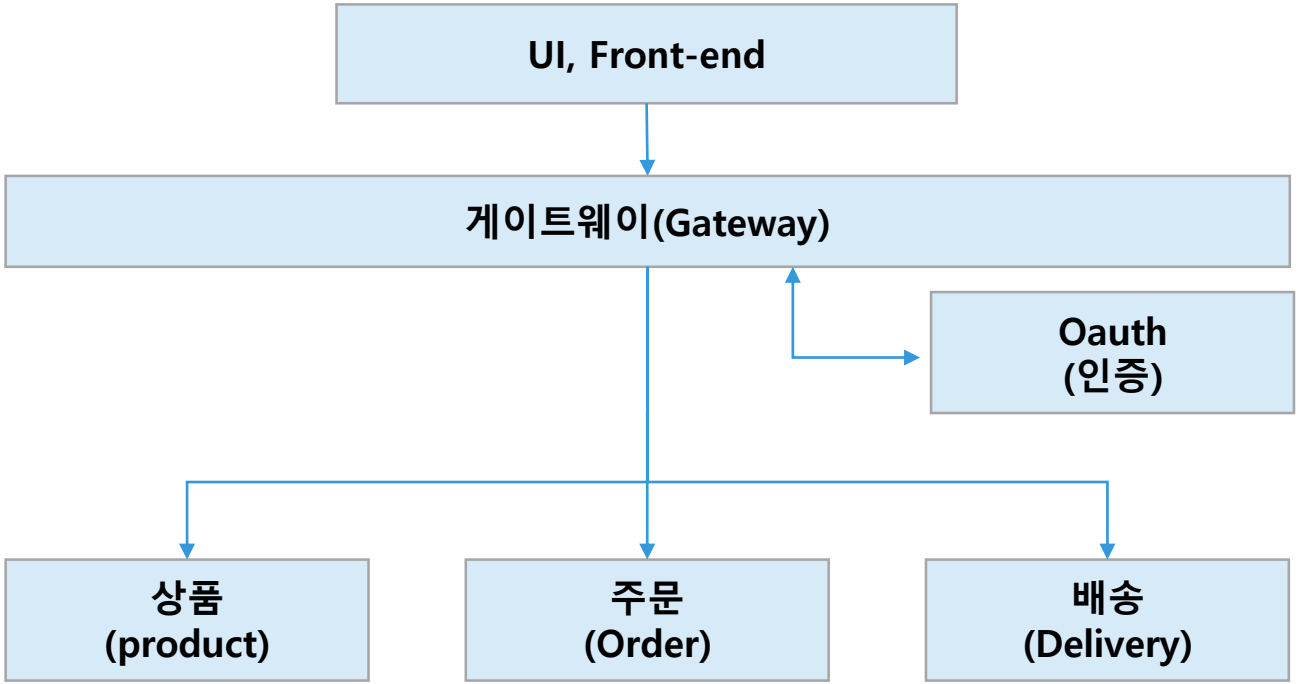
MSA Application Deployment

- Deploy using Ubuntu Shell
- 상품, 주문, 배송 서비스 배포
- 인증, 게이트웨이 배포
- Front-End 배포

MSA Application - 12 Street

MSA Service Structure



상품(Product) 서비스

1. Ubuntu 실행

   - 실습스크립트 참고 (https://workflowy.com/s/msa/27a0ioMCzlpV04lb#/98ec94e6e26d)

2. Shell에서 아래 스크립트 실행

```
Mkdir MSA-Sample
cd MSA-Sample

git clone https://github.com/event-storming/reqres_products.git
cd reqres_products
mvn package -Dmaven.test.skip=true

az acr build --registry [acr-registry-name] --image [acr-registry-name].azurecr.io/products:latest .

kubectl run products --image= [acr-registry-name].azurecr.io/products:latest
kubectl expose deploy products --type="ClusterIP" --port=8080

cd ..
```

주문(Order) 서비스

1. 공통된 작업을 편하게 하기 위해 Container Registry 를 환경변수로 설정
2. export 환경변수명=변수값
3. 확인
   echo ${환경변수명}

```
export CRNAME=[acr-registry-name]
export ACR=${CRNAME}.azurecr.io

git clone https://github.com/event-storming/reqres_orders.git
cd reqres_orders
export IMAGENAME=orders

mvn package -Dmaven.test.skip=true
az acr build --registry ${CRNAME} --image ${ACR}/${IMAGENAME}:latest .
kubectl run ${IMAGENAME} --image=${ACR}/${IMAGENAME}:latest
kubectl expose deploy ${IMAGENAME} --type="ClusterIP" --port=8080

cd ..
```

배송, 인증, 게이트웨이 서비스

- git clone https://github.com/event-storming/reqres_delivery.git
- export IMAGENAME=delivery

- git clone https://github.com/event-storming/oauth.git
- IMAGENAME=oauth

- git clone https://github.com/event-storming/gateway.git
- IMAGENAME=gateway
- 게이트웨이는 --type="LoadBalancer” 로 배포해야 함

UI 서비스

1. VueJs 로 되어있어서 nodejs 및 npm 으로 build 및 package
2. UI 에서 게이트웨이 주소를 바로 연결하기 위하여 env 를 설정

```
git clone https://github.com/event-storming/ui.git
cd ui
export IMAGENAME=ui

npm install
npm run build

az acr build --registry ${CRNAME} --image ${ACR}/${IMAGENAME}:latest .

_GATEWAY_IP=$(kubectl get -o jsonpath="{.status.loadBalancer.ingress[0].ip}" svc gateway --ignore-not-found)echo
${_GATEWAY_IP}
```

UI 서비스 배포

```
cat <<EOF | kubectl apply -f -
apiVersion: apps/v1
kind: Deployment
metadata:
  name: ${IMAGENAME}
  labels:
    app: ${IMAGENAME}
spec:
  replicas: 1
  selector:
    matchLabels:
      app: ${IMAGENAME}
  template:
    metadata:
      labels:
        app: ${IMAGENAME}
    spec:
      containers:
        - name: ${IMAGENAME}
          image: ${ACR}/${IMAGENAME}:latest
          ports:
            - containerPort: 8080
          env:
            - name: VUE_APP_API_HOST
              value: http://${_GATEWAY_IP}:8080
EOF

kubectl expose deploy ${IMAGENAME} --type="LoadBalancer" --port=8080
cd ..
```