```
apiVersion: v1
kind: Secret
metadata:
name: gift-secret
labels:
  app: gift-service
  project: gift-service
  tier: backend
# 민감 정보는 Base64로 인코딩되어 저장됩니다.
data:
JWT_SECRET: WW4ya2ppYmRkRkFXdG5QSjJBRmxMOFdYbW9oSk1DdmlnUWdnYUV5cGE1RT0=
KAKAO_CLIENT_ID: YWMyMGQ4NGY5N2I2NzlmMGJiZDlhODA2NWJhODIzZjM=
KAKAO_CLIENT_SECRET: RnczSmlMNVBrcGV2WFZaOU9pVk04YmZiZ0hVUEQ1RUE=
apiVersion: v1
kind: ConfigMap
metadata:
name: gift-config
labels:
  app: gift-service
  project: gift-service
  tier: backend
data:
SERVICE_PRODUCT_URI: "http://product-service-svc:8081"
KAKAO_REDIRECT_URI: "http://localhost:8080/members/login/oauth2/code/kakao"
API_GATEWAY_URI: "http://api-gateway-svc:8080"
apiVersion: apps/v1
kind: Deployment
metadata:
name: api-gateway
labels:
  app: api-gateway
  project: gift-service
  tier: backend
spec:
replicas: 1
selector:
  matchLabels:
     app: api-gateway
template:
  metadata:
     labels:
       app: api-gateway
       project: gift-service
      tier: backend
   spec:
     containers:
     - name: api-gateway
       image: sk124590/api-gateway:2.1
       ports:
       - containerPort: 8080
```

```
envFrom:
       - configMapRef:
           name: gift-config
       - secretRef:
           name: gift-secret
       resources:
         requests:
           cpu: "100m"
           memory: "256Mi"
         limits:
           cpu: "500m"
           memory: "512Mi"
apiVersion: v1
kind: Service
metadata:
 name: api-gateway-svc
 labels:
   app: api-gateway
   project: gift-service
  tier: backend
spec:
 ports:
 - port: 8080
  targetPort: 8080
 selector:
   app: api-gateway
 type: ClusterIP
apiVersion: apps/v1
kind: Deployment
metadata:
 name: user-service
 labels:
   app: user-service
   project: gift-service
   tier: backend
spec:
 replicas: 1
 selector:
   matchLabels:
     app: user-service
 template:
   metadata:
     labels:
       app: user-service
       project: gift-service
       tier: backend
   spec:
     containers:
     - name: user-service
       image: sk124590/user-service:2.1
       ports:
       - containerPort: 8084
```

```
envFrom:
       - configMapRef:
           name: gift-config
       - secretRef:
           name: gift-secret
       resources:
         requests:
           cpu: "150m"
           memory: "512Mi"
         limits:
           cpu: "1000m"
           memory: "1Gi"
apiVersion: v1
kind: Service
metadata:
 name: user-service-svc
 labels:
   app: user-service
   project: gift-service
   tier: backend
spec:
 ports:
 - port: 8084
   targetPort: 8084
 selector:
   app: user-service
 type: ClusterIP
apiVersion: apps/v1
kind: Deployment
metadata:
 name: product-service
 labels:
   app: product-service
   project: gift-service
   tier: backend
spec:
 replicas: 1
 selector:
   matchLabels:
     app: product-service
 template:
   metadata:
     labels:
       app: product-service
       project: gift-service
       tier: backend
   spec:
     containers:
     - name: product-service
       image: sk124590/product-service:2.1
       ports:
       - containerPort: 8081
```

```
resources:
         requests:
           cpu: "150m"
           memory: "512Mi"
         limits:
           cpu: "1000m"
           memory: "1Gi"
apiVersion: v1
kind: Service
metadata:
name: product-service-svc
labels:
   app: product-service
   project: gift-service
  tier: backend
spec:
ports:
 - port: 8081
  targetPort: 8081
selector:
  app: product-service
type: ClusterIP
apiVersion: apps/v1
kind: Deployment
metadata:
name: wish-service
labels:
  app: wish-service
   project: gift-service
  tier: backend
spec:
 replicas: 1
 selector:
   matchLabels:
     app: wish-service
template:
   metadata:
     labels:
       app: wish-service
       project: gift-service
       tier: backend
   spec:
     containers:
     - name: wish-service
       image: sk124590/wish-service:2.1
       ports:
       - containerPort: 8082
       envFrom:
       - configMapRef:
           name: gift-config
       resources:
         requests:
```

```
cpu: "100m"
           memory: "512Mi"
         limits:
           cpu: "700m"
           memory: "1Gi"
apiVersion: v1
kind: Service
metadata:
name: wish-service-svc
labels:
   app: wish-service
   project: gift-service
  tier: backend
spec:
 ports:
 - port: 8082
  targetPort: 8082
selector:
   app: wish-service
type: ClusterIP
apiVersion: apps/v1
kind: Deployment
metadata:
name: order-service
labels:
   app: order-service
   project: gift-service
  tier: backend
spec:
 replicas: 1
 selector:
   matchLabels:
     app: order-service
template:
   metadata:
     labels:
       app: order-service
       project: gift-service
       tier: backend
   spec:
     containers:
     - name: order-service
       image: sk124590/order-service:2.1
       ports:
       - containerPort: 8083
       envFrom:
       - configMapRef:
           name: gift-config
       - secretRef:
           name: gift-secret
       resources:
         requests:
```

```
cpu: "100m"
           memory: "512Mi"
         limits:
           cpu: "500m"
           memory: "512Mi"
apiVersion: v1
kind: Service
metadata:
name: order-service-svc
labels:
   app: order-service
   project: gift-service
  tier: backend
spec:
 ports:
 - port: 8083
  targetPort: 8083
selector:
   app: order-service
type: ClusterIP
apiVersion: apps/v1
kind: Deployment
metadata:
name: gift-app
labels:
  app: gift-app
   project: gift-service
  tier: frontend
spec:
 replicas: 1
 selector:
   matchLabels:
     app: gift-app
template:
   metadata:
     labels:
       app: gift-app
       project: gift-service
       tier: frontend
   spec:
     containers:
     - name: gift-app
       image: sk124590/gift-app:2.1
       ports:
       - containerPort: 8085
       envFrom:
       - configMapRef:
           name: gift-config
       - secretRef:
           name: gift-secret
       resources:
         requests:
```

```
cpu: "100m"
           memory: "512Mi"
         limits:
           cpu: "700m"
           memory: "1Gi"
apiVersion: v1
kind: Service
metadata:
name: gift-app-svc
 labels:
   app: gift-app
   project: gift-service
  tier: frontend
spec:
 ports:
 - port: 8080
  targetPort: 8085
 selector:
   app: gift-app
 type: LoadBalancer
```

| YAML 위치와 내용  | 참조된<br>Source   | 비고                                       |
|--|---|--|
| Secret.data.JWT_SECRET = WW4ya2  | source_5,<br>source_6,<br>source_7,<br>source_8,<br>source_10 | JWT 시크릿<br>값 (Base64 인<br>코딩)            |
| Secret.data.KAKAO_CLIENT_ID = YWMyMG   | source_6,<br>source_8,<br>source_10                           | 카카오 클라<br>이언트 ID<br>(Base64 인코<br>딩)     |
| Secret.data.KAKAO_CLIENT_SECRET = RnczSmlM   | source_6,<br>source_8,<br>source_10                           | 카카오 클라<br>이언트 Secret<br>(Base64 인코<br>딩) |
| <pre>ConfigMap.data.SERVICE_PRODUCT_URI = http://product-service-<br/>svc:8081</pre>                 | source_5,<br>source_9,<br>source_10                           | product-<br>service 내부<br>DNS 주소         |
| <pre>ConfigMap.data.KAKAO_REDIRECT_URI = http://localhost:8080/members/login/oauth2/code/kakao</pre> | source_6,<br>source_7   | 카카오 로그<br>인 Redirect<br>URI              |

| YAML 위치와 내용   | 참조된<br>Source | 비고                               |
|---|---------------|----------------------------------|
| <pre>ConfigMap.data.API_GATEWAY_URI = http://api-gateway-svc:8080</pre>                       | source_7      | API Gateway<br>내부 DNS 주<br>소     |
| <pre>api-gateway.Deployment.spec.containers[0].image = sk124590/api-<br/>gateway:2.1</pre>    | source_5      | api-gateway<br>컨테이너 이<br>미지      |
| <pre>api- gateway.Deployment.spec.containers[0].resources.requests/limits</pre>               | source_5      | CPU/메모리<br>요청 및 제한<br>값          |
| <pre>user-service.Deployment.spec.containers[0].image = sk124590/user-service:2.1</pre>       | source_6      | user-service<br>컨테이너 이<br>미지     |
| <pre>user- service.Deployment.spec.containers[0].resources.requests/limits</pre>              | source_6      | CPU/메모리<br>요청 및 제한<br>값          |
| <pre>product-service.Deployment.spec.containers[0].image = sk124590/product-service:2.1</pre> | source_8      | product-<br>service 컨테<br>이너 이미지 |
| <pre>product- service.Deployment.spec.containers[0].resources.requests/limits</pre>           | source_8      | CPU/메모리<br>요청 및 제한<br>값          |
| <pre>wish-service.Deployment.spec.containers[0].image = sk124590/wish-service:2.1</pre>       | source_9      | wish-service<br>컨테이너 이<br>미지     |
| <pre>wish- service.Deployment.spec.containers[0].resources.requests/limits</pre>              | source_9      | CPU/메모리<br>요청 및 제한<br>값          |
| <pre>order-service.Deployment.spec.containers[0].image = sk124590/order-service:2.1</pre>     | source_10     | order-service<br>컨테이너 이<br>미지    |
| <pre>order- service.Deployment.spec.containers[0].resources.requests/limits</pre>             | source_10     | CPU/메모리<br>요청 및 제한<br>값          |
| <pre>gift-app.Deployment.spec.containers[0].image = sk124590/gift-<br/>app:2.1</pre>          | source_7      | gift-app 컨테<br>이너 이미지            |

| YAML 위치와 내용  | 참조된<br>Source  | 비고   |
|--|--|--|
| <pre>gift- app.Deployment.spec.containers[0].resources.requests/limits</pre> | source_7   | CPU/메모리<br>요청 및 제한<br>값  |
| 모든 Deployment.spec.replicas = 1  | source_5,<br>source_6,<br>source_7,<br>source_8,<br>source_9,<br>source_10,<br>source_11 | 마이크로서비<br>스별 복제 수<br>기본값   |
| 모든 metadata.labels(app, project, tier)`                                      | source_11  | 공통 레이블<br>정책 (app,<br>project, tier<br>필수)                           |
| 모든 Service.spec.type = ClusterIP (단 gift-app-svc는 LoadBalancer)              | source_4   | 서비스 노출<br>정책: gift-app<br>만 외부<br>LoadBalancer,<br>나머지는<br>ClusterIP |

특징: 배포 실패. configMap에 서비스 URI가 모두 정의되지 않아서 필요한 환경변수를 주입해주지 못함