Microservices Project

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failed to solve: failed to compute cache key: failed to calculate checksum of ref 3e00ad75-fbb9-42fb-a153-a6c5fd327377::id1zudb0vbyz
8e5hvyzysow9q: failed to walk /var/lib/docker/tmp/buildkit-mount3825473971/build/libs: lstat /var/lib/docker/tmp/buildkit-mount38254
73971/build/libs: no such file or directory
master@master-vm:~/ecommerce-microservices$ cd product-service/
master@master-vm:~/ecommerce-microservices/product-service$ gradle clean build
OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
2025-03-22T13:05:00.136+05:30  INFO 20851 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManager
Factory for persistence unit 'default'
2025-03-22T13:05:00.143+05:30  INFO 20851 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource        : HikariPool-1 - Shutdown i
nitiated...
2025-03-22T13:05:00.198+05:30  INFO 20851 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource        : HikariPool-1 - Shutdown c
ompleted.

BUILD SUCCESSFUL in 26s
9 actionable tasks: 9 executed
master@master-vm:~/ecommerce-microservices/product-service$ gradle clean build -x test


BUILD SUCCESSFUL in 4s
6 actionable tasks: 6 executed
master@master-vm:~/ecommerce-microservices/product-service$ cd ..
master@master-vm:~/ecommerce-microservices$ ls
build             k8s                    payment-service   settings.gradle
docker-compose.yml  microservices.docx   product-service   user-service
error.txt         order-service          README.md
master@master-vm:~/ecommerce-microservices$ cd payment-service/
master@master-vm:~/ecommerce-microservices/payment-service$ gradle clean build
OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
2025-03-22T13:06:02.908+05:30  INFO 21389 --- [ntainer#0-0-C-1] org.apache.kafka.clients.NetworkClient    : [Consumer clientId=consum
er-payment-group-1, groupId=payment-group] Node 1 disconnected.
2025-03-22T13:06:02.918+05:30  INFO 21389 --- [ntainer#0-0-C-1] org.apache.kafka.clients.NetworkClient    : [Consumer clientId=consum
er-payment-group-1, groupId=payment-group] Cancelled in-flight METADATA request with correlation id 11 due to node 1 being disconnec
ted (elapsed time since creation: 4ms, elapsed time since send: 4ms, throttle time: 0ms, request timeout: 30000ms)
2025-03-22T13:06:02.954+05:30  INFO 21389 --- [ntainer#0-0-C-1] org.apache.kafka.clients.NetworkClient    : [Consumer clientId=consum
```

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topped

BUILD SUCCESSFUL in 30s
8 actionable tasks: 8 executed
master@master-vm:~/ecommerce-microservices/payment-service$ gradle clean build -x test

BUILD SUCCESSFUL in 3s
6 actionable tasks: 6 executed
master@master-vm:~/ecommerce-microservices/payment-service$ cd ..
master@master-vm:~/ecommerce-microservices$ cd user-service/
master@master-vm:~/ecommerce-microservices/user-service$ gradle clean build
Path for java installation '/usr/lib/jvm/openjdk-21' (Common Linux Locations) does not contain a java executable
OpenJDK 64-Bit Server VM warning: Sharing is only supported for boot loader classes because bootstrap classpath has been appended
2025-03-22T13:06:49.202+05:30  INFO 22471 --- [ionShutdownHook] j.LocalContainerEntityManagerFactoryBean : Closing JPA EntityManager
Factory for persistence unit 'default'
2025-03-22T13:06:49.206+05:30  INFO 22471 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource        : HikariPool-1 - Shutdown i
nitiated...
2025-03-22T13:06:49.210+05:30  INFO 22471 --- [ionShutdownHook] com.zaxxer.hikari.HikariDataSource        : HikariPool-1 - Shutdown c
ompleted.

BUILD SUCCESSFUL in 15s
9 actionable tasks: 9 executed
master@master-vm:~/ecommerce-microservices/user-service$ gradle clean build -x test

Path for java installation '/usr/lib/jvm/openjdk-21' (Common Linux Locations) does not contain a java executable

BUILD SUCCESSFUL in 4s
6 actionable tasks: 6 executed
master@master-vm:~/ecommerce-microservices/user-service$ cd ..
master@master-vm:~/ecommerce-microservices$ docker-compose up -d --build
WARN[0000] /home/master/ecommerce-microservices/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please
remove it to avoid potential confusion
Compose can now delegate builds to bake for better performance.
 To do so, set COMPOSE_BAKE=true.
[+] Building 1.7s (12/15)                                                    docker:default
```

master@master-vm: ~/ecommerce-microservices/k8s

```
master@master-vm:~/ecommerce-microservices$ ls build/libs/
ls: cannot access 'build/libs/': No such file or directory
master@master-vm:~/ecommerce-microservices$ cd order-service/
master@master-vm:~/ecommerce-microservices/order-service$ LS
LS: command not found
master@master-vm:~/ecommerce-microservices/order-service$ ls
build.gradle  Dockerfile  gradle  gradlew  gradlew.bat  src
master@master-vm:~/ecommerce-microservices/order-service$ ls -a
.   build.gradle  .gitattributes  gradle    gradlew.bat
..  Dockerfile    .gitignore      gradlew   src
master@master-vm:~/ecommerce-microservices/order-service$ gradle clean build

BUILD SUCCESSFUL in 10s
7 actionable tasks: 6 executed, 1 up-to-date
master@master-vm:~/ecommerce-microservices/order-service$ docker-compose up -d --build

WARN[0000] /home/master/ecommerce-microservices/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please
remove it to avoid potential confusion
Compose can now delegate builds to bake for better performance.
 To do so, set COMPOSE_BAKE=true.
[+] Building 32.0s (11/16)                                          docker:default
 => => transferring context: 2B                                                0.0s
 => [product-service internal] load .dockerignore                              0.0s
 => => transferring context: 2B                                                0.0s
 => [order-service internal] load .dockerignore                                0.0s
 => => transferring context: 2B                                                0.0s
 => [order-service 1/3] FROM docker.io/library/openjdk:21-jdk-slim@sha25      29.5s
[+] Building 32.1s (11/16)                                          docker:default
 => [order-service 1/3] FROM docker.io/library/openjdk:21-jdk-slim@sha25      29.6s
 => => sha256:a48f4cb737303e18b873b859fa7b779610a67a01e2d 4.77kB / 4.77kB      0.0s
 => => sha256:a803e7c4b030119420574a882a52b6431e160fceb 29.12MB / 29.12MB      4.1s
 => => sha256:b4972576c83dad66aa1e4f6d08e74f9e551e721a7cb 4.01MB / 4.01MB      1.9s
 => => sha256:af800cd8441e394f9ec3832393ff933c52e165 204.31MB / 204.31MB      15.9s
 => => sha256:7072053847a8a05d7f3a14ebc778a90b38c50ce7e8f1993 547B / 547B      0.0s
[+] Building 44.3s (28/28) FINISHED                                 docker:default
 => [order-service internal] load build definition from Dockerfile             0.0s
```

master@master-vm: ~/ecommerce-microservices/k8s

```
 ✓ Container order-service                        Running                0.0s
 ✓ Container payment-service                      Running                0.0s
 ✓ Container user-service                         Running                0.0s
master@master-vm:~/ecommerce-microservices/order-service$ docker ps
CONTAINER ID   IMAGE                              COMMAND                CREATED         STATUS                   PORTS
                                                  NAMES
d35967e9a3db   bhargavakulla/payment-service      "java -jar app.jar"    55 seconds ago  Up 36 seconds            8083/tcp, 0.0.0.0
:8083->8080/tcp, :::8083->8080/tcp                payment-service
8a92344505f4   bhargavakulla/order-service        "java -jar app.jar"    55 seconds ago  Up 39 seconds            8084/tcp, 0.0.0.0
:8084->8080/tcp, :::8084->8080/tcp                order-service
1c9786113c20   bhargavakulla/product-service      "java -jar app.jar"    56 seconds ago  Up 45 seconds            8082/tcp, 0.0.0.0
:8082->8080/tcp, :::8082->8080/tcp                product-service
494a2b3684e7   bhargavakulla/user-service         "java -jar app.jar"    56 seconds ago  Up 45 seconds            8081/tcp, 0.0.0.0
:8081->8080/tcp, :::8081->8080/tcp                user-service
de3d3957f84d   confluentinc/cp-kafka              "/etc/confluent/dock…" 56 seconds ago  Up 45 seconds            0.0.0.0:9092->909
2/tcp, :::9092->9092/tcp                          kafka
0af7a45528c6   postgres                           "docker-entrypoint.s…" 56 seconds ago  Up 52 seconds (healthy)  0.0.0.0:5432->543
2/tcp, :::5432->5432/tcp                          ecommerce-microservices-postgres-1
f0605194f877   confluentinc/cp-zookeeper          "/etc/confluent/dock…" 56 seconds ago  Up 51 seconds            2888/tcp, 0.0.0.0
:2181->2181/tcp, :::2181->2181/tcp, 3888/tcp      zookeeper
master@master-vm:~/ecommerce-microservices/order-service$ docker logs order-service


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  \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
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 =========|_|==============|___/=/_/_/_/

 :: Spring Boot ::                (v3.4.3)

2025-03-22T09:16:32.926Z  INFO 1 --- [           main] com.example.order.OrderApplication       : Starting OrderApplication using Ja
va 21 with PID 1 (/app/app.jar started by root in /app)
2025-03-22T09:16:33.131Z  INFO 1 --- [           main] com.example.order.OrderApplication       : No active profile set, falling bac
k to 1 default profile: "default"
master@master-vm:~/ecommerce-microservices/order-service$ docker-compose down
```

```
va 21 with PID 1 (/app/app.jar started by root in /app)
2025-03-22T09:16:33.131Z  INFO 1 --- [           main] com.example.order.OrderApplication        : No active profile set, falling bac
k to 1 default profile: "default"
master@master-vm:~/ecommerce-microservices/order-service$ docker-compose down
WARN[0000] /home/master/ecommerce-microservices/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please
remove it to avoid potential confusion
[+] Running 8/8
 ✓ Container payment-service                        Removed                    12.4s
 ✓ Container user-service                           Removed                    11.4s
 ✓ Container product-service                        Removed                    12.1s
 ✓ Container order-service                          Removed                     9.4s
 ✓ Container ecommerce-microservices-postgres-1     Removed                     0.6s
 ✓ Container kafka                                  Remo...                     1.8s
 ✓ Container zookeeper                              Removed                     0.8s
 ✓ Network ecommerce-microservices_default         Removed                     0.3s
master@master-vm:~/ecommerce-microservices/order-service$ docker-compose up -d
WARN[0000] /home/master/ecommerce-microservices/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please
remove it to avoid potential confusion
[+] Running 8/8
 ✓ Network ecommerce-microservices_default          Created                    0.2s
 ✓ Container zookeeper                              Started                     3.9s
 ✓ Container ecommerce-microservices-postgres-1     Started                     3.7s
 ✓ Container product-service                        Started                     8.5s
 ✓ Container user-service                           Started                     9.2s
 ✓ Container kafka                                  Star...                     9.2s
 ✓ Container order-service                          Started                    12.5s
 ✓ Container payment-service                        Started                    14.8s
master@master-vm:~/ecommerce-microservices/order-service$ docker-compose up -d --build
WARN[0000] /home/master/ecommerce-microservices/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please
remove it to avoid potential confusion
Compose can now delegate builds to bake for better performance.
To do so, set COMPOSE_BAKE=true.
[+] Building 4.5s (27/27) FINISHED                                        docker:default
 => [order-service internal] load build definition from Dockerfile        0.1s
 => => transferring dockerfile: 334B                                      0.0s
 => [payment-service internal] load metadata for docker.io/library/openjd 1.8s
```

```
master@master-vm:~/ecommerce-microservices/order-service$ docker exec -it ecommerce-microservices-postgres-1 psql -U postgres
psql (17.4 (Debian 17.4-1.pgdg120+2))
Type "help" for help.

postgres=# \l
postgres=# CREATE DATABASE ecommerce;
CREATE DATABASE
postgres=# \dt
          List of relations
 Schema |   Name   | Type  |  Owner
--------+----------+-------+----------
 public | products | table | postgres
 public | users    | table | postgres
(2 rows)

postgres=# exit
master@master-vm:~/ecommerce-microservices/order-service$ cd ..
master@master-vm:~/ecommerce-microservices$ ls
build                  error.txt  microservices.docx  payment-service  README.md      user-service
docker-compose.yml  k8s         order-service      product-service  settings.gradle
master@master-vm:~/ecommerce-microservices$ docker ps
CONTAINER ID   IMAGE                          COMMAND                  CREATED          STATUS                    PORTS
                                                                       NAMES
d7dddf36260c   bhargavakulla/payment-service  "java -jar app.jar"      About an hour ago   Up About an hour       8083/tcp, 0
.0.0.0:8083->8080/tcp, :::8083->8080/tcp                               payment-service
77b740440522   confluentinc/cp-kafka          "/etc/confluent/dock…"   About an hour ago   Up About an hour       0.0.0.0:909
2->9092/tcp, :::9092->9092/tcp                                         kafka
6781574b2035   bhargavakulla/user-service     "java -jar app.jar"      About an hour ago   Up About an hour       8081/tcp, 0
.0.0.0:8081->8080/tcp, :::8081->8080/tcp                               user-service
df5636338547   bhargavakulla/product-service  "java -jar app.jar"      About an hour ago   Up About an hour       8082/tcp, 0
.0.0.0:8082->8080/tcp, :::8082->8080/tcp                               product-service
03b608ad2bc3   confluentinc/cp-zookeeper      "/etc/confluent/dock…"   About an hour ago   Up About an hour       2888/tcp, 0
.0.0.0:2181->2181/tcp, :::2181->2181/tcp, 3888/tcp   zookeeper
1da762e07fc9   postgres                       "docker-entrypoint.s…"   About an hour ago   Up About an hour (healthy)  0.0.0.0:543
2->5432/tcp, :::5432->5432/tcp                                         ecommerce-microservices-postgres-1
master@master-vm:~/ecommerce-microservices$ docker-compose build
```

master@master-vm: ~/ecommerce-microservices/k8s

```
✓ Pushing bhargavakulla/order-service: aa799bd56231 Layer already exists                          8.3s
✓ Pushing bhargavakulla/order-service: 659a8c4ba776 Layer already exists                          8.3s
✓ Pushing bhargavakulla/order-service: 0ac7ecf8a41c Layer already exists                          8.2s
✓ Pushing bhargavakulla/order-service: d310e774110a Layer already exists                          8.2s
master@master-vm:~/ecommerce-microservices$ ls
build                    error.txt  microservices.docx  payment-service  README.md       user-service
docker-compose.yml  k8s   order-service   product-service  settings.gradle
master@master-vm:~/ecommerce-microservices$ cd k8s/
master@master-vm:~/ecommerce-microservices/k8s$ ls
order-service-deployment.yaml   payment-service-deployment.yaml   product-service-deployment.yaml   user-service-deployment.yaml
order-service-service.yaml      payment-service-service.yaml      product-service-service.yaml      user-service-service.yaml
master@master-vm:~/ecommerce-microservices/k8s$ nano order-service-deployment.yaml
master@master-vm:~/ecommerce-microservices/k8s$ nano payment-service-deployment.yaml
master@master-vm:~/ecommerce-microservices/k8s$ nano product-service-deployment.yaml
master@master-vm:~/ecommerce-microservices/k8s$ nano user-service-deployment.yaml
master@master-vm:~/ecommerce-microservices/k8s$ nano order-service-service.yaml
master@master-vm:~/ecommerce-microservices/k8s$ kubectl apply -f .
deployment.apps/order-service created
service/order-service created
deployment.apps/payment-service created
service/payment-service created
deployment.apps/product-service created
service/product-service created
deployment.apps/user-service created
service/user-service created
master@master-vm:~/ecommerce-microservices/k8s$ kubectl get pods
NAME                          READY   STATUS        RESTARTS       AGE
flask-app-694d959f47-65blr    1/1     Running       0              3h17m
flask-app-694d959f47-7sqrg    1/1     Running       0              3h17m
flask-app-694d959f47-bvk8f    1/1     Terminating   0              4d5h
flask-app-694d959f47-fs2c6    1/1     Terminating   0              4d5h
flask-app-694d959f47-rlccq    1/1     Running       1 (3h2m ago)   4d5h
flask-app-694d959f47-rwdt5    1/1     Running       1 (3h2m ago)   4d5h
mysql-66d468f74c-6ggzz        1/1     Terminating   0              4d5h
mysql-66d468f74c-bws29        1/1     Running       0              3h17m
nginx-78b5b78b99-7nwgk        1/1     Terminating   0              4d5h
```

master@master-vm: ~/ecommerce-microservices/k8s

```
payment-service-5bf96544b8-l5v2m   0/1   Running            0     61s
product-service-6f9459ff7-4svvr    0/1   ContainerCreating  0     61s
user-service-67fd4d9c47-5p4q9      1/1   Running            0     60s
master@master-vm:~/ecommerce-microservices/k8s$ kubectl get pods
NAME                          READY   STATUS        RESTARTS       AGE
flask-app-694d959f47-65blr    1/1     Running       0              3h18m
flask-app-694d959f47-7sqrg    1/1     Running       0              3h18m
flask-app-694d959f47-bvk8f    1/1     Terminating   0              4d5h
flask-app-694d959f47-fs2c6    1/1     Terminating   0              4d5h
flask-app-694d959f47-rlccq    1/1     Running       1 (3h3m ago)   4d5h
flask-app-694d959f47-rwdt5    1/1     Running       1 (3h3m ago)   4d5h
mysql-66d468f74c-6ggzz        1/1     Terminating   0              4d5h
mysql-66d468f74c-bws29        1/1     Running       0              3h18m
nginx-78b5b78b99-7nwgk        1/1     Terminating   0              4d5h
nginx-78b5b78b99-shswf        1/1     Running       0              3h18m
order-service-646676ccbf-m9cx9     0/1   Running     0              75s
payment-service-5bf96544b8-l5v2m   0/1   Running     0              75s
product-service-6f9459ff7-4svvr    0/1   Running     0              75s
user-service-67fd4d9c47-5p4q9      1/1   Running     0              74s
master@master-vm:~/ecommerce-microservices/k8s$ kubectl get all -o wide
NAME                          READY   STATUS        RESTARTS       AGE    IP              NODE         NOMINATED NODE   RE
ADINESS GATES
pod/flask-app-694d959f47-65blr    1/1   Running       0            3h18m  172.16.94.236   worker1-vm   <none>           <n
one>
pod/flask-app-694d959f47-7sqrg    1/1   Running       0            3h18m  172.16.94.238   worker1-vm   <none>           <n
one>
pod/flask-app-694d959f47-bvk8f    1/1   Terminating   0            4d5h   172.16.114.92   worker2-vm   <none>           <n
one>
pod/flask-app-694d959f47-fs2c6    1/1   Terminating   0            4d5h   172.16.114.91   worker2-vm   <none>           <n
one>
pod/flask-app-694d959f47-rlccq    1/1   Running       1 (3h3m ago) 4d5h   172.16.94.233   worker1-vm   <none>           <n
one>
pod/flask-app-694d959f47-rwdt5    1/1   Running       1 (3h3m ago) 4d5h   172.16.94.229   worker1-vm   <none>           <n
one>
pod/mysql-66d468f74c-6ggzz        1/1   Terminating   0            4d5h   172.16.114.93   worker2-vm   <none>           <n
one>
```

```
                                    List of databases
   Name    |  Owner   | Encoding | Locale Provider |  Collate   |   Ctype    | Locale | ICU Rules |    Access privileges
-----------+----------+----------+-----------------+------------+------------+--------+-----------+------------------------
 postgres  | postgres | UTF8     | libc            | en_US.utf8 | en_US.utf8 |        |           |
 template0 | postgres | UTF8     | libc            | en_US.utf8 | en_US.utf8 |        |           | =c/postgres           +
           |          |          |                 |            |            |        |           | postgres=CTc/postgres
 template1 | postgres | UTF8     | libc            | en_US.utf8 | en_US.utf8 |        |           | =c/postgres           +
           |          |          |                 |            |            |        |           | postgres=CTc/postgres
(3 rows)
```

localhost:8081/login

Please sign in

Username

Password

Sign in