

Dockerfile

```
networks:
  todo-net:

services:
  webapp:
    build: ./todo-webapp
    image: "todo-webapp:release-3.1"
    container_name: todo-webapp
    stdin_open: true
    ports:
      - "3000:3000"
    networks:
      - todo-net

  service:
    build: ./todo
    image: "todo-service:release-3"
    container_name: todo-service
    networks:
      - todo-net
    environment:
      NOTIFICATION_HOST: notification
      REDIS_HOST: redis

  notification:
    build: ./todo-notification
    image: "todo-notification:release-1.1"
    container_name: notification-service
    expose:
      - "9000"
    networks:
      - todo-net
    environment:
      REDIS_HOST: redis

  redis:
    image: "redis"
    container_name: redis
    networks:
      - todo-net

  api-gateway:
    build: .nginx
    container_name: api-gateway
    networks:
      - todo-net
    ports:
      - "8000:8000"
```

Docker compose up -d

```
PS C:\Users\Vivobook\github\my-chula-courses\2110415-soft-def-sys\activity03> docker compose up -d
[+] Running 1/1
! service Warning pull access denied for todo-service, repository does not exist or may require 'docker login'
#1 [internal] load local bake definitions
#1 reading from stdin 2.30kB done
#1 DONE 0.0s

#2 [internal] load build definition from Dockerfile
#2 transferring dockerfile: 225B 0.0s done
#2 DONE 0.0s

#3 [internal] load metadata for docker.io/library/python:3.7-buster
#3 ...

#4 [auth] library/python:pull token for registry-1.docker.io
#4 DONE 0.0s

#3 [internal] load metadata for docker.io/library/python:3.7-buster
#3 DONE 4.0s

#5 [internal] load .dockerignore
#5 transferring context: 2B done
#5 DONE 0.0s

#6 [internal] load build context
#6 transferring context: 583B 0.0s done
#6 DONE 0.0s

#7 [1/4] FROM docker.io/library/python:3.7-buster@sha256:2539f956bccc5e4a48ebdafbbbfbd26b4ab56e65b96076ae9cd1188b119b3
#7 resolve docker.io/library/python:3.7-buster@sha256:2539f956bccc5e4a48ebdafbbbfbd26b4ab56e65b96076ae9cd1188b119b3 0.0s done
#7 CACHED

#8 [2/4] COPY . /root/todo
#8 DONE 0.0s
```

Docker ps -a

```
PS C:\Users\Vivobook\github\my-chula-courses\2110415-soft-def-sys\activity03> docker ps -a
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS              PORTS
d5a66fd7ec39   todo-service:release-3              "/bin/sh -c 'python ..." 12 minutes ago Exited (0) 51 seconds ago
b75081e66a0f   activity03-api-gateway              "/docker-entrypoint..."    12 minutes ago Up 52 seconds      0.0.0.0:8
2c535f1376a7   todo-notification:release-1.1       "/bin/sh -c 'python ..."  12 minutes ago Exited (0) 51 seconds ago
e
5f17edc23556   redis                                "docker-entrypoint.s..."   12 minutes ago Up 51 seconds      6379/tcp
28816848cc17   todo-webapp:release-3.1             "docker-entrypoint.s..."   12 minutes ago Up 51 seconds      0.0.0.0:3
PS C:\Users\Vivobook\github\my-chula-courses\2110415-soft-def-sys\activity03> |
```

Todo App

Uber To Do

0 (Tue Sep 08 2025 23:56:30 GMT+0700 (Indochina Time))

pew pew



pew pew

Tue Sep 08 2025 23:55:29 GMT+0700 (Indochina Time)

Add