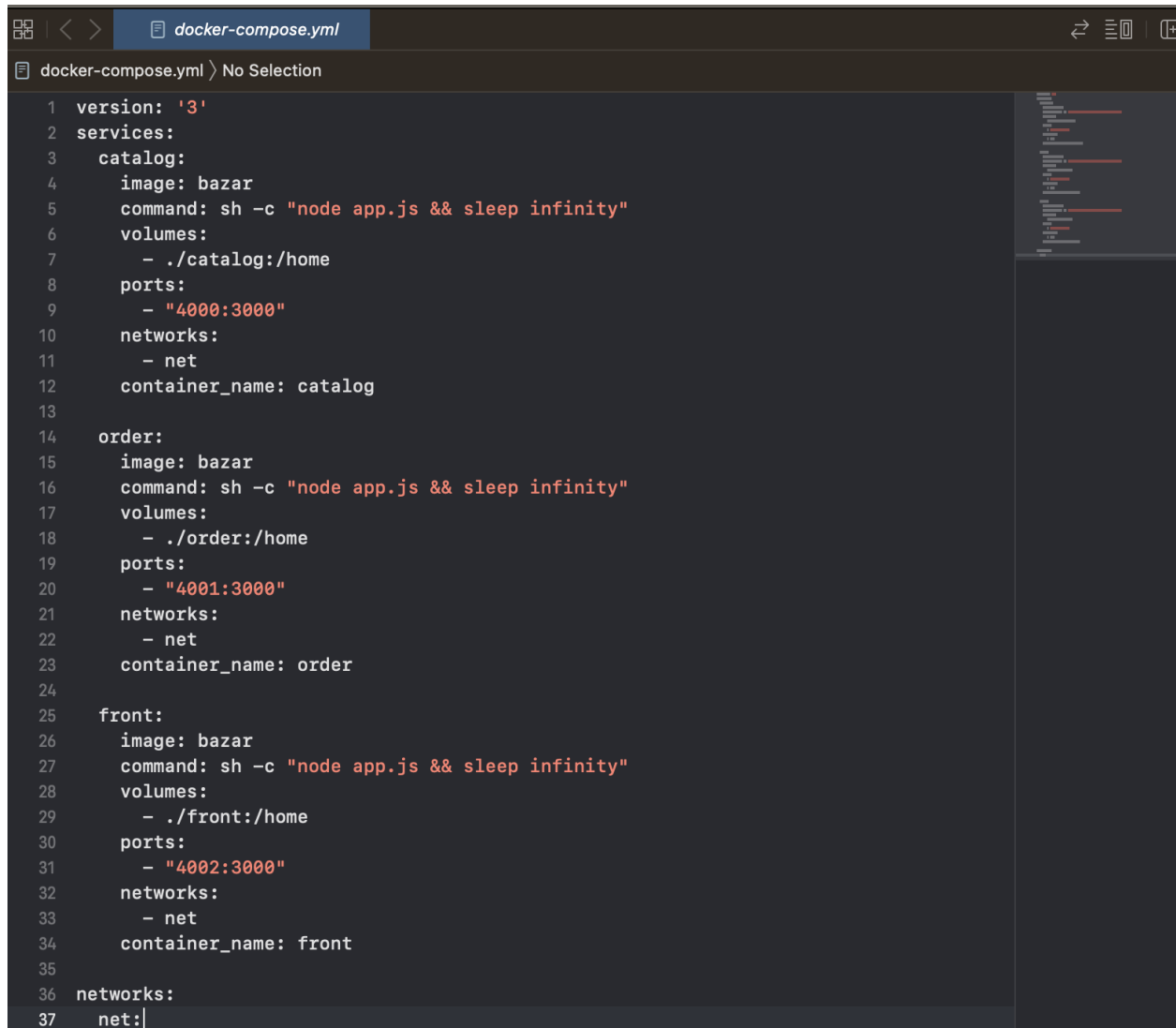


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Docker Compose File Description:



```
1 version: '3'
2 services:
3   catalog:
4     image: bazar
5     command: sh -c "node app.js && sleep infinity"
6     volumes:
7       - ./catalog:/home
8     ports:
9       - "4000:3000"
10    networks:
11      - net
12    container_name: catalog
13
14  order:
15    image: bazar
16    command: sh -c "node app.js && sleep infinity"
17    volumes:
18      - ./order:/home
19    ports:
20      - "4001:3000"
21    networks:
22      - net
23    container_name: order
24
25  front:
26    image: bazar
27    command: sh -c "node app.js && sleep infinity"
28    volumes:
29      - ./front:/home
30    ports:
31      - "4002:3000"
32    networks:
33      - net
34    container_name: front
35
36  networks:
37    net:
```

The provided Docker Compose file is used to define and manage a multi-container Docker application. The application consists of three services: catalog, order, and front. Each service is based on the same Docker image named "bazar" and runs a Node.js application.

Services:

Catalog Service:

- **Image:** bazar
- **Command:** Executes the Node.js application using the command "sh -c 'node app.js && sleep infinity.'"
- **Volumes:** Mounts the local directory "./catalog" to the "/home" directory within the container.
- **Ports:** Maps port 4000 on the host to port 3000 on the container.
- **Network:** Connects to the "net" network.
- **Container Name:** catalog

Order Service:

- **Image:** bazar
- **Command:** Executes the Node.js application using the command "sh -c 'node app.js && sleep infinity.'"
- **Volumes:** Mounts the local directory "./order" to the "/home" directory within the container.
- **Ports:** Maps port 4001 on the host to port 3000 on the container.
- **Network:** Connects to the "net" network.
- **Container Name:** order

Front Service:

- **Image:** bazar
- **Command:** Executes the Node.js application using the command "sh -c 'node app.js && sleep infinity.'"
- **Volumes:** Mounts the local directory "./front" to the "/home" directory within the container.
- **Ports:** Maps port 4002 on the host to port 3000 on the container.
- **Network:** Connects to the "net" network.
- **Container Name:** front

Network:

- A network named "net" is defined, but its configuration is incomplete in the provided snippet.

Summary:

This Docker Compose file sets up three containers, each running a Node.js application based on the "bazar" image. The containers are isolated within the "net" network, and

their respective codebases are mounted from local directories. The defined ports allow external access to the services.

To run this project:

First, clone the repository from GitHub SSH: `git@github.com:norasadder/Bazar.git`
HTTP: `https://github.com/norasadder/Bazar.git`

After that, create the image using `docker build -t bazar .`

Then, use `docker compose up -d` to run the docker containers or `docker compose down` to stop the containers.

Note: You can find the URLs explained in the output document.

Improvement:

Whenever we want to update a file, we need to read the whole file, and then rewrite it. Using a database as an extension, we can only change the part of data we want without reading the whole file. In this way, the performance can be enhanced.