

What is Docker Compose?

Docker Compose is a tool that lets you run **multiple Docker containers together using one file**.

Simple meaning

- Docker Compose = “run full app setup with one command”

Instead of starting containers one by one:

```
docker run frontend
docker run backend
docker run database
```

You do:

```
docker compose up
```

Real-world analogy

Think of a web app:

- Frontend (React / Vite)
- Backend (Node / Express)
- Database (MongoDB)

Without Compose:

- You manually start each container

With Compose:

- One file + one command = everything starts

Correct setup (since you are using nginx)

Your Dockerfile (GOOD ✓)

You already have correct production build:

```
# Build stage
FROM node:20 AS build

WORKDIR /app
COPY package.json package-lock.json ./
RUN npm install

COPY . .
RUN npm run build

# Production stage
FROM nginx:alpine
COPY --from=build /app/dist /usr/share/nginx/html

EXPOSE 80
CMD ["nginx", "-g", "daemon off;"]
```

```
Dockerfile x docker-compose.yml
1 # Step 1: Build the app
2 FROM node:20 AS build
3
4 WORKDIR /app
5
6 COPY package.json package-lock.json ./
7 RUN npm install
8
9 COPY . .
10 RUN npm run build
11
12 # Step 2: Serve using Nginx
13 FROM nginx:alpine
14
15 COPY --from=build /app/dist /usr/share/nginx/html
16
17 EXPOSE 80
18
19 CMD ["nginx", "-g", "daemon off;"]
```

Now **FIX** your docker-compose.yml

Remove npm command completely

Use this:

```
version: "3.8"

services:
  frontend:
    build: .
    ports:
      - "80:80"
```

```
Dockerfile  docker-compose.yml
1  version: "3.8"
2
3  services:
4    frontend:
5      build: .
6      ports:
7        - "80:80"
```

▶ Run it

```
docker compose up --build
```

Open in browser

```
http://localhost
```

[Home](#) [About](#) [Services](#)

Hello

Client

Welcome to

This is my first React a

