

Dockerized React App (Multi-Stage Build)

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# Dockerized React App (Multi-Stage Build)
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This document contains the complete setup for a Dockerized React app using a multi-stage build process.
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## Folder Structure
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```
my-react-app/  
    Dockerfile  
    .dockerignore  
    package.json  
    package-lock.json  
    public/  
        index.html  
    src/  
        index.js
```

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## Dockerfile
```

```
FROM node:18-alpine AS builder  
WORKDIR /app  
COPY package*.json ./  
RUN npm install --frozen-lockfile  
COPY . .  
RUN npm run build  
  
FROM nginx:alpine  
COPY --from=builder /app/build /usr/share/nginx/html  
EXPOSE 80  
CMD ["nginx", "-g", "daemon off;"]
```

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## .dockerignore
```

```
node_modules  
build  
.dockerignore  
Dockerfile  
.git  
.gitignore  
README.md
```

```
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## package.json
```

```
{  
  "name": "my-react-app",  
  "version": "1.0.0",  
  "private": true,  
  "dependencies": {  
    "react": "^18.3.1",  
    "react-dom": "^18.3.1",  
    "react-scripts": "5.0.1"  
  },  
  "scripts": {  
    "start": "react-scripts start",  
    "build": "react-scripts build",  
    "test": "react-scripts test",  
    "eject": "react-scripts eject"  
  }  
}
```

```
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## public/index.html
```

```
<!DOCTYPE html>  
<html lang="en">
```

```
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>My React App</title>
</head>
<body>
  <div id="root"></div>
</body>
</html>

-----
## src/index.js

import React from "react";
import ReactDOM from "react-dom/client";

const App = () => {
  return (
    <div style={{ textAlign: "center", marginTop: "60px" }}>
      <h1>Hello from Dockerized React App !</h1>
      <p>This React app was built with a multi-stage Docker build!</p>
    </div>
  );
};

const root = ReactDOM.createRoot(document.getElementById("root"));
root.render(<App />);

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## Build & Run Commands

docker build -t my-react-app .
docker run -p 3000:80 my-react-app

Open http://localhost:3000 in your browser to view the app.
```