TIC3001 Task 1A

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- Github: https://github.com/keyule/3001-Task1A

View the markdown version for better formatting at:
https://github.com/keyule/3001-Task1A/blob/main/Report/report.md

Task 1.1

Instructions

1. Create docker file at /app/Dockerfile containing:

```
# syntax=docker/dockerfile:1
FROM node:18
ENV NODE_ENV=production

WORKDIR /app

COPY package*.json .
COPY package-lock.json* .

RUN npm install --production

COPY . .

CMD [ "npm", "start" ]
```
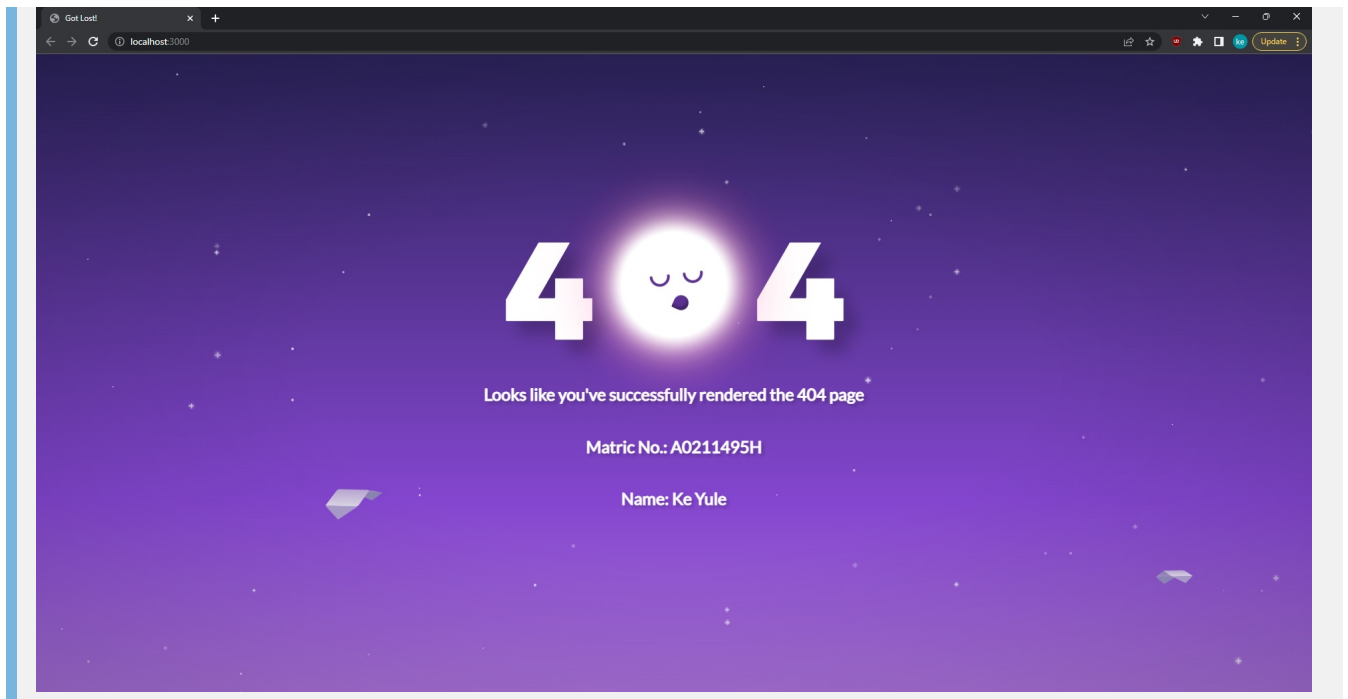
2. `docker build -t <AppName> .`
3. `docker run -p 3000:3000 <AppName>`

Screenshot

Task 1.2

Instructions

1. Create a nginx.conf file containing:
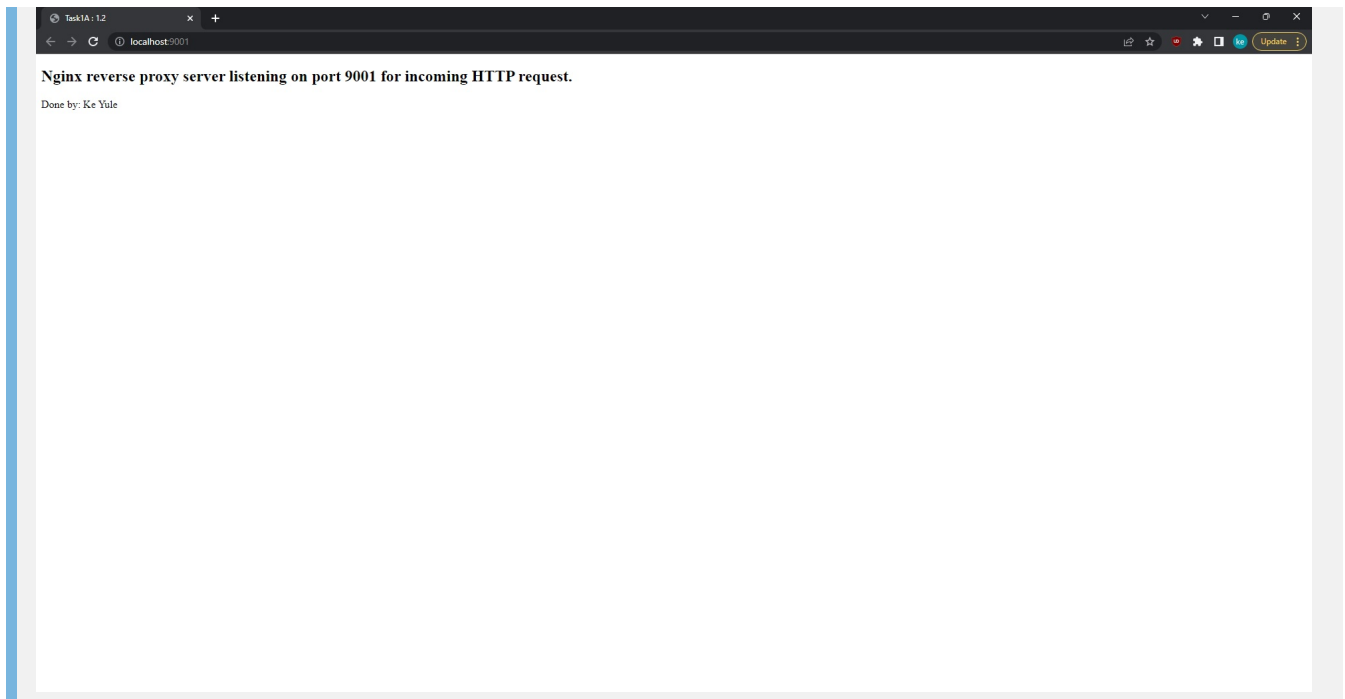
```
server {
    listen 9001;
    server_name localhost;

    location / {
        proxy_pass http://localhost:80;
    }
}
```

2. Create a docker file containing:

```
FROM nginx:latest
COPY . /usr/share/nginx/html/

COPY nginx.conf /etc/nginx/conf.d/
```

3. `docker build -t <NginxAppName> .`
4. `docker run -p 9001:9001 <NginxAppName>`

Screenshot

report.md

Task 1.3

Instructions

1. Reuse the same Dockerfile for the node app
2. Create a nginx.conf file in the nginx folder containing:

```
events {}
http {
  server {
    listen 80;
    location / {
      proxy_pass http://web:3000;
      proxy_set_header Host $host;
      proxy_set_header X-Real-IP $remote_addr;
      proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
    }
  }
}
```

3. Create a docker-compose.yml in the root folder containing:

```
version: '3.3'
services:
  web:
    build: ./app
  nginx:
    image: nginx:latest
    ports:
      - "80:80"
    volumes:
```

```
            - ./nginx/nginx.conf:/etc/nginx/nginx.conf
        depends_on:
          - web
```

4. `docker-compose up --build`

Note: I changed the port to 3000 in index.js

Sreenshot