Docker - Challenge #3

CPSY 300
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Screenshots:

```
TERMINAL    PORTS    GITLENS    SQL CONSOLE    DEBUG CONSOLE    PROBLEMS    OUTPUT

nicho challenge3 >> ls
total 12K
-rw-r--r-- 1 nicho 197609 4.2K Apr 20 10:00 challenge3.zip
drwxr-xr-x 1 nicho 197609    0 Apr 20 10:39 .
drwxr-xr-x 1 nicho 197609    0 Apr 20 10:38 ..
drwxr-xr-x 1 nicho 197609    0 Apr  3 12:14 docker
nicho challenge3 >>
```

```
nicho challenge3 >> docker build -t challenge3-db docker/db/.
[+] Building 0.9s (7/7) FINISHED                                            docker:default
 => [internal] load build definition from Dockerfile                               0.0s
 => => transferring dockerfile: 101B                                               0.0s
 => [internal] load metadata for docker.io/library/mariadb:latest                 0.8s
 => [internal] load .dockerignore                                                  0.0s
 => => transferring context: 2B                                                    0.0s
 => [internal] load build context                                                  0.0s
 => => transferring context: 59B                                                   0.0s
 => [1/2] FROM docker.io/library/mariadb:latest@sha256:78d0c3b8c39b47e91cc32df64ef1e26f797b54b1dd762c850e7350  0.0s
 => CACHED [2/2] COPY ./init/init.sql /docker-entrypoint-initdb.d/                 0.0s
 => exporting to image                                                             0.0s
 => => exporting layers                                                            0.0s
 => => writing image sha256:9629ee27ac17709c4bbe902857afae3df2131ca70ce693658a670f549c471d1b  0.0s
 => => naming to docker.io/library/challenge3-db                                   0.0s

View build details: docker-desktop://dashboard/build/default/default/0dd8gq3lvjcigimkvmclfz88y

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview
```

```
nicho challenge3 >> docker build -t challenge3-api docker/api/.
2024/04/20 14:17:39 http2: server: error reading preface from client //./pipe/docker_engine: file has already been c
losed
[+] Building 0.7s (10/10) FINISHED                                          docker:default
 => [internal] load build definition from Dockerfile                               0.0s
 => => transferring dockerfile: 453B                                               0.0s
 => [internal] load metadata for docker.io/library/node:alpine                     0.6s
 => [internal] load .dockerignore                                                  0.0s
 => => transferring context: 2B                                                    0.0s
 => [1/5] FROM docker.io/library/node:alpine@sha256:6d0f18a1c67dc218c4af50c21256616286a53c09e500fadf025b6d342  0.0s
 => [internal] load build context                                                  0.1s
 => => transferring context: 44.71kB                                               0.1s
 => CACHED [2/5] WORKDIR /app                                                      0.0s
 => CACHED [3/5] COPY ./package*.json ./                                           0.0s
 => CACHED [4/5] RUN npm install                                                   0.0s
 => CACHED [5/5] COPY ./* .                                                        0.0s
 => exporting to image                                                             0.0s
 => => exporting layers                                                            0.0s
 => => writing image sha256:9167bc6256e26d893d39186e6a7ac8d593eff27c6b55fdfa85726a1846b36b06  0.0s
 => => naming to docker.io/library/challenge3-api                                  0.0s

View build details: docker-desktop://dashboard/build/default/default/kczvv73f57t4viqd33d6rcn6h

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```
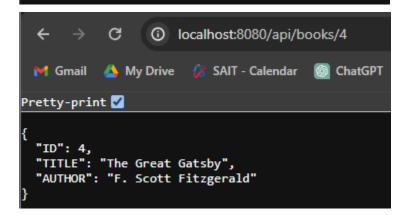
```
nicho challenge3 >> docker build -t challenge3-nginx docker/nginx/.
2024/04/20 14:17:50 http2: server: error reading preface from client //./pipe/docker_engine: file has already been c
losed
[+] Building 0.8s (8/8) FINISHED                                            docker:default
 => [internal] load build definition from Dockerfile                               0.0s
 => => transferring dockerfile: 132B                                               0.0s
 => [internal] load metadata for docker.io/library/nginx:latest                    0.6s
 => [internal] load .dockerignore                                                  0.0s
 => => transferring context: 2B                                                    0.0s
 => [1/3] FROM docker.io/library/nginx:latest@sha256:0463a96ac74b84a8a1b27f3d1f4ae5d1a70ea823219394e131f5bf35  0.0s
 => [internal] load build context                                                  0.0s
 => => transferring context: 31B                                                   0.0s
 => CACHED [2/3] RUN rm /etc/nginx/conf.d/default.conf                             0.0s
 => CACHED [3/3] COPY nginx.conf /etc/nginx/conf.d/default.conf                    0.0s
 => exporting to image                                                             0.0s
 => => exporting layers                                                            0.0s
 => => writing image sha256:6e2453991c8c76f1844a5be8c06535e73cbd0deb04ebf54b79023980288f0d85  0.0s
 => => naming to docker.io/library/challenge3-nginx                                0.0s

View build details: docker-desktop://dashboard/build/default/default/gm8l1xv9whuxlecrwnyks1gf6

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```

```
nicho challenge3 >> docker-compose up -d
[+] Running 3/4
 - Network challenge3_default    Created                                                    1.4s
 ✓ Container challenge3-db-1      Started                                                    0.6s
 ✓ Container challenge3-api-1     Started                                                    0.9s
 ✓ Container challenge3-nginx-1   Started                                                    1.2s
nicho challenge3 >> docker-compose ps
NAME                 IMAGE             COMMAND                SERVICE   CREATED         STATUS        PORTS
challenge3-api-1     c3-api:latest     "docker-entrypoint.s…"  api      4 minutes ago   Up 4 minutes  0.0.0.0:3000->3000/tcp
challenge3-db-1      c3-db:latest      "docker-entrypoint.s…"  db       4 minutes ago   Up 4 minutes  0.0.0.0:3306->3306/tcp
challenge3-nginx-1   c3-nginx:latest   "/docker-entrypoint.…"  nginx    4 minutes ago   Up 4 minutes  80/tcp, 0.0.0.0:8080->8080/tcp
nicho challenge3 >>
```

← → C ⓘ localhost:8080/api/books

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Pretty-print ☑

```json
[
  {
    "ID": 1,
    "TITLE": "To Kill a Mockingbird",
    "AUTHOR": "Harper Lee"
  },
  {
    "ID": 2,
    "TITLE": "1984",
    "AUTHOR": "George Orwell"
  },
  {
    "ID": 3,
    "TITLE": "Pride and Prejudice",
    "AUTHOR": "Jane Austen"
  },
  {
    "ID": 4,
    "TITLE": "The Great Gatsby",
    "AUTHOR": "F. Scott Fitzgerald"
  }
]
```

← → C ⓘ localhost:8080/api/books/4

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Pretty-print ☑

```json
{
  "ID": 4,
  "TITLE": "The Great Gatsby",
  "AUTHOR": "F. Scott Fitzgerald"
}
```