

```
File Edit Selection View Go Run Terminal Help ← → api
EXPLORER
  API
    > models
    > node_modules
    > routes
    > .dockerignore
    > .env
    > .gitignore
    > dockerfile
    package-lock.json
    package.json
    server.js
  dockerfile
    1 RUN npm install
    2 COPY . .
    3
    4 # Run stage
    5 FROM node:18-slim
    6 WORKDIR /app
    7 COPY --from=builder /app .
    8 EXPOSE 3000
    9
    10 HEALTHCHECK --interval=30s --timeout=5s --start-period=10s CMD curl --fail http://localhost:3000 || exit 1
    11
    12 CMD ["node", "server.js"]
    13
    14
    15
    16
    17

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
saeedqj@SaeedQJ-PC: /mnt/d/Sabist/DevOps/Docker Assignment/docker-microservices/api$ docker build -t api-service ../api
[+] Building 98.5s (5/13)
=> [builder 1/5] FROM docker.io/library/node:18-slim@sha256:c6ae79e38498325db67193d391e6ec1d224d96c693a8a4d943498556716d3783 91.11s
=> => sha256:c6ae79e38498325db67193d391e6ec1d224d96c693a8a4d943498556716d3783 6.41kB / 6.41kB 0.0s
=> => sha256:eb9363371ee2859fada3c5af88d4abc6ff7d399addb13b7de3c1f11bdee6b9 2.49kB / 2.49kB 0.0s
=> => sha256:b50082bc3670d0306bd90e4b0e5bb10265ba5d0ee16bf40f9a505f7045ee563 6.39kB / 6.39kB 0.0s
=> => sha256:3e6b9d1a95114e19f12262ade8a59ad1d1a10ca7b82108adc70605a200294964 48.49kB / 48.49kB 30.3s
=> => sha256:37927e901b1b2688b72796c6881bf645480268eca4ac9a37b9219e950bb4d84 24.02kB / 24.02kB 39.3s
=> => sha256:79b2f47ad443652b9b5cc81a95de249fd976310efdbec159f29638783778c0 59.77kB / 64.40kB 91.0s
=> => sha256:ez3f899911d692f620851cf49a1e91294288a115f5cd20014180e4d3684d3ab 42.99kB / 211.36kB 91.0s
=> => extracting sha256:3e6b9d1a95114e19f12262ade8a59ad1d1a10ca7b82108adc70605a200294964 8.4s
=> => sha256:cda7f44f2bdcc4bb7514474024b3f3705de0dd6355a33be5ac7800e5b7125 3.32kB / 3.32kB 39.8s
=> => extracting sha256:37927e901b1b2688b72796c6881bf645480268eca4ac9a37b9219e950bb4d84 2.1s
=> => sha256:c6b30c3f1696552af10ac00521f6035b1cf4d46ac120b1038587e28583ce7 39.85kB / 45.68kB 91.0s
=> [stage-1 1/3] FROM docker.io/library/node:18-slim@sha256:f9ab18e354e6855ae56ef2b290dd225c1e51a564f87584b9bd21dd651838830e 91.11s
=> => resolve docker.io/library/node:18-slim@sha256:f9ab18e354e6855ae56ef2b290dd225c1e51a564f87584b9bd21dd651838830e 0.0s
=> => sha256:f9ab18e354e6855ae56ef2b290dd225c1e51a564f87584b9bd21dd651838830e 6.49kB / 6.49kB 0.0s
=> => sha256:fc3faf127a182135fd956e8d570b1932a758f800886d8dd6e131cf89de9605 1.93kB / 1.93kB 0.0s
=> => sha256:101ee128c8e90af6e5eba2abb4e8486503c6383c3530e2c60842a5a288479 6.54kB / 6.54kB 0.0s
=> [Internal] load build context 0.2s
=> => transferring context: 34.15kB 0.1s
```

```
saeedqj@SaeedQJ-PC: ~
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

saeedqj@SaeedQJ-PC:~$
saeedqj@SaeedQJ-PC:~$ docker volume create mongo-data
mongo-data
saeedqj@SaeedQJ-PC:~$ docker network create app-network
3dc857e0366c3a1a7baab54a3f8524566e4726c173e5e762f18a86d10938a5a1
saeedqj@SaeedQJ-PC:~$ docker container run -d --name mongo-container --network app-network -v mongo-data:/data
/db -e MONGO_INITDB_ROOT_USERNAME=root -e MONGO_INITDB_ROOT_PASSWORD=saeed123 mongo
Unable to find image 'mongo:latest' locally
latest: Pulling from library/mongo
d9d352c11bbd: Pull complete
0a4282d2a9c9: Pull complete
e88cb4c0b31e: Pull complete
06b43d55bbbc: Pull complete
697905244caf: Pull complete
ebd0c6090698: Pull complete
3e961522d85c: Downloading 119.5MB/259.8MB
35581a5e0588: Download complete
```

```
saeedqj@SaeedQJ-PC:~$ docker container run -d --name api-container --network app-network -p 3000:3000 api-ser
vice
27942cfb9edcdf0d9a994d85450cf35e8bfd1701c65bcef21a620dbb295d67bd
saeedqj@SaeedQJ-PC:~$ curl http://localhost:3000/
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Error</title>
</head>
<body>
<pre>Cannot GET /</pre>
</body>
</html>
saeedqj@SaeedQJ-PC:~$ curl http://localhost:3000/api/users
[{"_id":"685a8254fd6ba606bf1706cc","name":"Jamil","email":"abc.123@gmail.com","password":"abc123","createdAt":
"2025-06-24T10:47:48.040Z","__v":0},{_id":"685a86323a197f2e764d4f94","name":"Saeed","email":"abcd.123@gmail.c
om","password":"abc123","createdAt":"2025-06-24T11:04:18.389Z","__v":0}]saeedqj@SaeedQJ-PC:~$ ^C
saeedqj@SaeedQJ-PC:~$
```

```
saeedqj@SaeedQJ-PC: ~$ docker logs api-container
(node:1) [MONGODB DRIVER] Warning: useUrlParser is a deprecated option: useUrlParser has no effect since
Node.js Driver version 4.0.0 and will be removed in the next major version
(Use 'node --trace-warnings ...' to show where the warning was created)
(node:1) [MONGODB DRIVER] Warning: useUnifiedTopology is a deprecated option: useUnifiedTopology has no effect
since Node.js Driver version 4.0.0 and will be removed in the next major version
Server is running on port 3000
MongoDB connected successfully
saeedqj@SaeedQJ-PC: ~$
```

Containers

View all your running containers and applications. [Learn more](#)

Container CPU usage: 0.68% / 400% (4 CPUs available)

Container memory usage: 221.9MB / 7.51GB

Name	Container ID	Image	Port(s)	CPU (%)	Last started	Actions
mongo-container	62038fdff6363	mongo		0.68%	5 minutes ago	[Stop] [Refresh] [Delete]
api-container	27942cfb9edc	api-service	3000:3000	0%	4 minutes ago	[Stop] [Refresh] [Delete]

Volumes / mongo-data

Created: 11 minutes ago

Stored data

Name	Size	Last modified	Mode
_mdb_catalog.wt	20 kB	5 minutes ago	-rw----
.mongodb	7.3 kB	5 minutes ago	drwx----
collection-0-8369347412348196829.wt	20 kB	5 minutes ago	-rw----
collection-2-8369347412348196829.wt	36 kB	4 minutes ago	-rw----
collection-4-8369347412348196829.wt	4 kB	5 minutes ago	-rw----

```
saeedqj@SaeedQJ-PC: ~$ docker push bcsbs2212302/mongo:v1
The push refers to repository [docker.io/bcsbs2212302/mongo]
2efbb75f3b44: Mounted from library/mongo
be3760a797af: Mounted from library/mongo
76c2b8fe8b7f: Mounted from library/mongo
46908bd08046: Mounted from library/mongo
2d02395a5aa7: Mounted from library/mongo
ae4734e1c5a4: Mounted from library/mongo
1c395636d063: Mounted from library/mongo
a8346d259389: Mounted from library/mongo
v1: digest: sha256:cfdf70960bbd27e49a1521eb9dabde7045e4aeff1cfd13df9d856d524b2468a size: 1994
saeedqj@SaeedQJ-PC: ~$ docker push bcsbs2212302/api-service:v1
The push refers to repository [docker.io/bcsbs2212302/api-service]
b5c08d6e1b7a: Pushed
5b40ad7b484b: Pushed
e1e93a4fa4fd: Mounted from library/node
9b95ddc8a140: Mounted from library/node
cd1cd7c2e57b: Mounted from library/node
206f13f5e317: Mounted from library/node
ace34d1d784c: Mounted from library/node
v1: digest: sha256:b134e781e748acdcd4f95fa142f29747366af7abfe1e06a0d860b8fe12954d72 size: 1784
saeedqj@SaeedQJ-PC: ~$
```

