

Docker ex1

Tuesday, October 31, 2023 8:57 PM

Build frontend docker image: In the root folder, run the following command:

`docker build ./frontend -t frontend`

```
ledang@VNLAP03337:~/MyDockerImages$ cd $Home
ledang@VNLAP03337:~$ mkdir dockerlearn
ledang@VNLAP03337:~$ cd dockerlearn
ledang@VNLAP03337:~/dockerlearn$ git clone https://github.com/nashtech-garage/kubernetes
Cloning into 'kubernetes'...
remote: Enumerating objects: 138, done.
remote: Counting objects: 100% (138/138), done.
remote: Compressing objects: 100% (96/96), done.
remote: Total 138 (delta 50), reused 119 (delta 31), pack-reused 0
Receiving objects: 100% (138/138), 3.61 MiB | 754.00 KiB/s, done.
Resolving deltas: 100% (50/50), done.
ledang@VNLAP03337:~/dockerlearn$ cd src
bash: cd: src: No such file or directory
ledang@VNLAP03337:~/dockerlearn$ dir
kubernetes
ledang@VNLAP03337:~/dockerlearn$ cd kubernetes/src
bash: cd: kubernetes/src: No such file or directory
ledang@VNLAP03337:~/dockerlearn$ cd kubernetes
ledang@VNLAP03337:~/dockerlearn/kubernetes$ cd src
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$ docker build ./frontend -t frontend
[+] Building 151.4s (11/11) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile                  0.1s
=> => transferring dockerfile: 936B                                  0.0s
=> [internal] load .dockerignore                                    0.1s
```

```
=> [internal] load build context                                    0.1s
=> => transferring context: 74.76kB                                  0.0s
=> [2/6] WORKDIR /usr/src/app                                       3.3s
=> [3/6] COPY package.json /usr/src/app/package.json              0.1s
=> [4/6] COPY package-lock.json /usr/src/app/package-lock.json    0.2s
=> [5/6] RUN npm ci                                                 11.3s
=> [6/6] COPY . /usr/src/app                                        0.1s
=> exporting to image                                               0.8s
=> => exporting layers                                              0.8s
=> => writing image sha256:ac78c2068eacbc02eb4096919ed505a082ed4ad58a089f30b704706239772435 0.0s
=> => naming to docker.io/library/backend                          0.0s
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$
```

• Build backend docker image: In the root folder, run the following command:

`docker build ./backend -t backend`

```
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$ docker build ./frontend -t frontend
[+] Building 151.4s (11/11) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile                  0.1s
=> => transferring dockerfile: 936B                                  0.0s
=> [internal] load .dockerignore                                    0.1s
[+] Building 12.7s (4/10)                                           docker:default
=> [internal] load .dockerignore                                    0.1s
```

```
=> [internal] load build context                                    0.1s
=> => transferring context: 74.76kB                                  0.0s
=> [2/6] WORKDIR /usr/src/app                                       3.3s
=> [3/6] COPY package.json /usr/src/app/package.json              0.1s
=> [4/6] COPY package-lock.json /usr/src/app/package-lock.json    0.2s
=> [5/6] RUN npm ci                                                 11.3s
=> [6/6] COPY . /usr/src/app                                        0.1s
=> exporting to image                                               0.8s
=> => exporting layers                                              0.8s
=> => writing image sha256:ac78c2068eacbc02eb4096919ed505a082ed4ad58a089f30b704706239772435 0.0s
=> => naming to docker.io/library/backend                          0.0s
```

• Verify the docker images:

Run the command to verify the docker images

`docker image ls`

```
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$ docker image ls
REPOSITORY          TAG         IM
AGE ID             CREATED      SIZE
backend             latest      ac
78c2068eac         About a minute ago  297MB
frontend            latest      0c
c274bf70e9         6 minutes ago  1.31GB
my_first_image      latest      0c
85c4353220         About an hour ago  123MB
vsc-mslearn-python-products-474ae4931fd093e5c5cbe2ef478386688952abf3a5dda8de1250229a44587784-uid latest      30
d35f68872d         21 hours ago  1.51GB
ubuntu              latest      e4
c58958181a         3 weeks ago   77.8MB
hello-world         latest      9c
7a54a9a43c         5 months ago  13.3kB
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$
```

• Start the application :

In the root folder, Run the command to start the application

`sudo apt install docker-compose`

`docker-compose up`

```
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$ docker-compose up
Command 'docker-compose' not found, but can be installed with:
sudo apt install docker-compose
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$ sudo apt install docker-compose
```

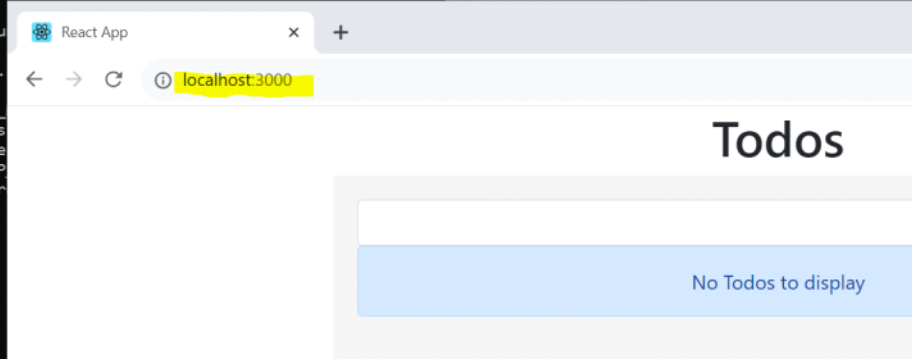
```
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$ docker-compose up
Creating network "src_express-mongo" with the default driver
```

• Verify the application :

open browser to access application at URL: localhost:3000

```
ledang@VNLAP03337: ~/dockerlearn/kubernetes/src
```

```
UID: 8cacc2a9-bad8-4df1-ac34-f0014b7ab4f2 and options: {}
mongo_1 | 2023-10-31T14:08:07.049+0000 I INDEX [conn2] index build: done building index_id on ns Todo
App.todos
Frontend_1 | > my-app@0.1.0 start
Frontend_1 | > react-scripts start
Frontend_1 | Browserslist: caniuse-lite is outdated. Please run
Frontend_1 | npx browserslist@latest --update-db
Frontend_1 | Why you should do it regularly: https://github.
Frontend_1 |
Frontend_1 | (node:35) [DEP_WEBPACK_DEV_SERVER_ON_AFTER_SETUP_
Frontend_1 | dleware' option is deprecated. Please use the 'setupMiddlewares
Frontend_1 | (Use 'node --trace-deprecation ...' to show where
Frontend_1 | (node:35) [DEP_WEBPACK_DEV_SERVER_ON_BEFORE_SETUP
Frontend_1 | iddleware' option is deprecated. Please use the 'setupMiddlewar
Frontend_1 | Starting the development server...
Frontend_1 |
Frontend_1 | Compiled successfully!
Frontend_1 |
Frontend_1 | You can now view my-app in the browser.
Frontend_1 |
Frontend_1 | Local: http://localhost:3000
Frontend_1 | On Your Network: http://172.19.0.3:3000
Frontend_1 |
Frontend_1 | Note that the development build is not optimized.
Frontend_1 | To create a production build, use npm run build.
Frontend_1 |
Frontend_1 | asset static/js/bundle.js 2.1 MiB [emitted] (name
Frontend_1 | asset index.html 1.67 KiB [emitted]
Frontend_1 | asset asset-manifest.json 190 bytes [emitted]
Frontend_1 | runtime modules 28.2 KiB 13 modules
Frontend_1 | modules by path ./node_modules/ 1.39 MiB 125 modu
Frontend_1 | asset modules 4.4 KiB
```



Ctrl C to stop

```
^CGracefully stopping... (press Ctrl+C again to force)
Stopping src_frontend_1 ...
Stopping src_backend_1 ...
Stopping src_mongo_1 ...
Killing src_frontend_1 ... done
Killing src_backend_1 ... done
Killing src_mongo_1 ... done
ERROR: 2
ledang@VNLAP03337:~/dockerlearn/kubernetes/src$
```