Golang app

devops@devops:~$ sudo su

[sudo] password for devops:

root@devops:/home/devops# apt install git

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

The following additional packages will be installed:

git-man liberror-perl

Suggested packages:

git-daemon-run | git-daemon-sysvinit git-doc git-email git-gui gitk gitweb

git-cvs git-mediawiki git-svn

The following NEW packages will be installed:

git git-man liberror-perl

0 upgraded, 3 newly installed, 0 to remove and 191 not upgraded.

Need to get 4,147 kB of archives.

After this operation, 21.0 MB of additional disk space will be used.

Do you want to continue? [Y/n] y

Get:1 http://tn.archive.ubuntu.com/ubuntu jammy/main amd64 liberror-perl all 0.17029-1 [26.5 kB]

Get:2 http://tn.archive.ubuntu.com/ubuntu jammy-updates/main amd64 git-man all 1:2.34.1-1ubuntu1.10 [954 kB]

Get:3 http://tn.archive.ubuntu.com/ubuntu jammy-updates/main amd64 git amd64 1:2.34.1-1ubuntu1.10 [3,166 kB]

Fetched 4,147 kB in 11s (388 kB/s)

Selecting previously unselected package liberror-perl.

(Reading database ... 199410 files and directories currently installed.)

Preparing to unpack .../liberror-perl\_0.17029-1\_all.deb ...

Unpacking liberror-perl (0.17029-1) ...

Selecting previously unselected package git-man.

Preparing to unpack .../git-man\_1%3a2.34.1-1ubuntu1.10\_all.deb ...

Unpacking git-man (1:2.34.1-1ubuntu1.10) ...

Selecting previously unselected package git.

Preparing to unpack .../git\_1%3a2.34.1-1ubuntu1.10\_amd64.deb ...

Unpacking git (1:2.34.1-1ubuntu1.10) ...

Setting up liberror-perl (0.17029-1) ...

Setting up git-man (1:2.34.1-1ubuntu1.10) ...

Setting up git (1:2.34.1-1ubuntu1.10) ...

Processing triggers for man-db (2.10.2-1) ...

root@devops:/home/devops# apt install docker.io

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

The following additional packages will be installed:

bridge-utils containerd pigz runc ubuntu-fan

Suggested packages:

ifupdown aufs-tools btrfs-progs cgroupfs-mount | cgroup-lite debootstrap

docker-doc rinse zfs-fuse | zfsutils

The following NEW packages will be installed:

bridge-utils containerd docker.io pigz runc ubuntu-fan

0 upgraded, 6 newly installed, 0 to remove and 191 not upgraded.

Need to get 69.4 MB of archives.

After this operation, 266 MB of additional disk space will be used.

Do you want to continue? [Y/n] y

Get:1 http://tn.archive.ubuntu.com/ubuntu jammy/universe amd64 pigz amd64 2.6-1 [63.6 kB]

Get:2 http://tn.archive.ubuntu.com/ubuntu jammy/main amd64 bridge-utils amd64 1.7-1ubuntu3 [34.4 kB]

Get:3 http://tn.archive.ubuntu.com/ubuntu jammy-updates/main amd64 runc amd64 1.1.7-0ubuntu1~22.04.1 [4,249 kB]

Get:4 http://tn.archive.ubuntu.com/ubuntu jammy-updates/main amd64 containerd amd64 1.7.2-0ubuntu1~22.04.1 [36.0 MB]

Get:5 http://tn.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 docker.io amd64 24.0.5-0ubuntu1~22.04.1 [28.9 MB]

Get:6 http://tn.archive.ubuntu.com/ubuntu jammy/universe amd64 ubuntu-fan all 0.12.16 [35.2 kB]

Fetched 69.4 MB in 31s (2,263 kB/s)

Preconfiguring packages ...

Selecting previously unselected package pigz.

(Reading database ... 200395 files and directories currently installed.)

Preparing to unpack .../0-pigz\_2.6-1\_amd64.deb ...

Unpacking pigz (2.6-1) ...

Selecting previously unselected package bridge-utils.

Preparing to unpack .../1-bridge-utils\_1.7-1ubuntu3\_amd64.deb ...

Unpacking bridge-utils (1.7-1ubuntu3) ...

Selecting previously unselected package runc.

Preparing to unpack .../2-runc\_1.1.7-0ubuntu1~22.04.1\_amd64.deb ...

Unpacking runc (1.1.7-0ubuntu1~22.04.1) ...

Selecting previously unselected package containerd.

Preparing to unpack .../3-containerd\_1.7.2-0ubuntu1~22.04.1\_amd64.deb ...

Unpacking containerd (1.7.2-0ubuntu1~22.04.1) ...

Selecting previously unselected package docker.io.

Preparing to unpack .../4-docker.io\_24.0.5-0ubuntu1~22.04.1\_amd64.deb ...

Unpacking docker.io (24.0.5-0ubuntu1~22.04.1) ...

Selecting previously unselected package ubuntu-fan.

Preparing to unpack .../5-ubuntu-fan\_0.12.16\_all.deb ...

Unpacking ubuntu-fan (0.12.16) ...

Setting up runc (1.1.7-0ubuntu1~22.04.1) ...

Setting up bridge-utils (1.7-1ubuntu3) ...

Setting up pigz (2.6-1) ...

Setting up containerd (1.7.2-0ubuntu1~22.04.1) ...

Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service →

/lib/systemd/system/containerd.service.

Setting up ubuntu-fan (0.12.16) ...

Created symlink /etc/systemd/system/multi-user.target.wants/ubuntu-fan.service →

/lib/systemd/system/ubuntu-fan.service.

Setting up docker.io (24.0.5-0ubuntu1~22.04.1) ...

Adding group `docker' (GID 137) ...

Done.

Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /li

b/systemd/system/docker.service.

Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /lib/sy

stemd/system/docker.socket.

Processing triggers for man-db (2.10.2-1) ...

root@devops:/home/devops# mkdir devops\_docker

root@devops:/home/devops# chmod 777 devops\_docker/

root@devops:/home/devops/devops\_docker# git clone https://github.com/jomn123/gocode.git

Cloning into 'gocode'...

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (5/5), done.

remote: Total 5 (delta 1), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (5/5), done.

Resolving deltas: 100% (1/1), done.

root@devops:/home/devops/devops\_docker# chmod 777 gocode

root@devops:/home/devops/devops\_docker# cd gocode

root@devops:/home/devops/devops\_docker/gocode# ls -l

total 16

-rw-r--r-- 1 root root 912 جانفي 26 10:12 go.mod

-rw-r--r-- 1 root root 5128 جانفي 26 10:12 go.sum

-rw-r--r-- 1 root root 424 جانفي 26 10:12 server.go

root@devops:/home/devops/devops\_docker/gocode# chmod 777 go.mod

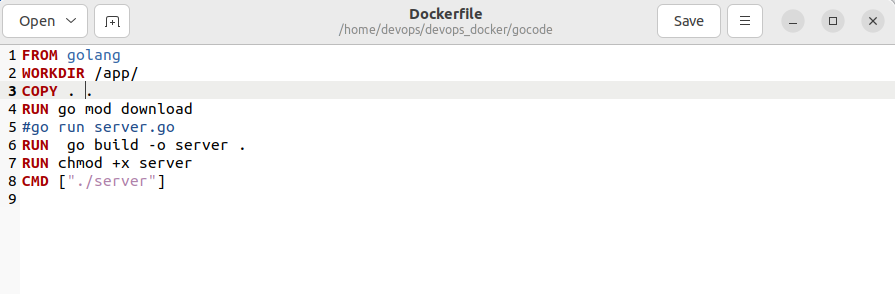
root@devops:/home/devops/devops\_docker/gocode# chmod 777 go.sum

root@devops:/home/devops/devops\_docker/gocode# chmod 777 server.go

root@devops:/home/devops/devops\_docker/gocode# rm -rf .git

root@devops:/home/devops/devops\_docker/gocode# ls -a

. .. Dockerfile go.mod go.sum server.go



root@devops:/home/devops/devops\_docker/gocode# docker run -p 8080:8080 -d gocodeapp

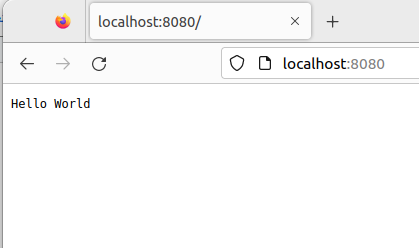
3aa35b8c431459a2be43b240a91e40ad6e6c6059d36cf2097ee1ed12a1b40e82

root@devops:/home/devops/devops\_docker/gocode# docker images

REPOSITORY TAG IMAGE ID CREATED SIZE

gocodeapp latest 57e4c9dcd484 5 minutes ago 995MB

golang latest 60b429352f94 9 days ago 815MB



Flaskapp:

root@devops:/home/devops/devops\_docker# git clone https://github.com/jomn123/flaskapp.git

Cloning into 'flaskapp'...

remote: Enumerating objects: 4, done.

remote: Counting objects: 100% (4/4), done.

remote: Compressing objects: 100% (3/3), done.

remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (4/4), done.

root@devops:/home/devops/devops\_docker# chmod 777 flaskapp/

root@devops:/home/devops/devops\_docker# ls -al

total 16

drwxrwxrwx 4 root root 4096 جانفي 26 10:38 .

drwxr-x--- 17 devops devops 4096 جانفي 26 10:10 ..

drwxrwxrwx 3 root root 4096 جانفي 26 10:38 flaskapp

drwxrwxrwx 2 root root 4096 جانفي 26 10:20 gocode

root@devops:/home/devops/devops\_docker# cd flaskapp/

root@devops:/home/devops/devops\_docker/flaskapp# ls -l

total 8

-rw-r--r-- 1 root root 156 جانفي 26 10:38 app.py

-rw-r--r-- 1 root root 6 جانفي 26 10:38 requirments.txt

root@devops:/home/devops/devops\_docker/flaskapp# chmod 777 app.py

root@devops:/home/devops/devops\_docker/flaskapp# chmod 777 requirments.txt

root@devops:/home/devops/devops\_docker/flaskapp# rm -rf .git\*

root@devops:/home/devops/devops\_docker/flaskapp# ls -al

total 16

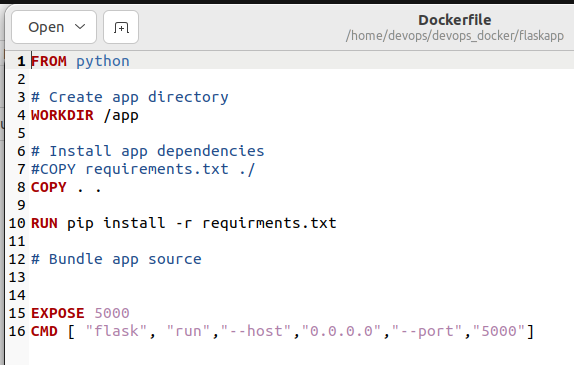
drwxrwxrwx 2 root root 4096 جانفي 26 10:41 .

drwxrwxrwx 4 root root 4096 جانفي 26 10:38 ..

-rwxrwxrwx 1 root root 156 جانفي 26 10:38 app.py

-rwxrwxrwx 1 root root 6 جانفي 26 10:38 requirments.txt

root@devops:/home/devops/devops\_docker/flaskapp# gedit Dockerfile



root@devops:/home/devops/devops\_docker/flaskapp# docker build -t flaskapps .

DEPRECATED: The legacy builder is deprecated and will be removed in a future release.

Install the buildx component to build images with BuildKit:

https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 4.096kB

Step 1/6 : FROM python

---> e7177b0afd0e

Step 2/6 : WORKDIR /app

---> Using cache

---> 3b44ae04df42

Step 3/6 : COPY . .

---> acd93491adf3

Step 4/6 : RUN pip install -r requirments.txt

---> Running in 58709c2d7940

Collecting flask (from -r requirments.txt (line 1))

Obtaining dependency information for flask from https://files.pythonhosted.org/packages/bd/0e/63738e88e981ae57c23bad6c499898314a1110a4141f77d7bd929b552fb4/flask-3.0.1-py3-none-any.whl.metadata

Downloading flask-3.0.1-py3-none-any.whl.metadata (3.6 kB)

Collecting Werkzeug>=3.0.0 (from flask->-r requirments.txt (line 1))

Obtaining dependency information for Werkzeug>=3.0.0 from https://files.pythonhosted.org/packages/c3/fc/254c3e9b5feb89ff5b9076a23218dafbc99c96ac5941e900b71206e6313b/werkzeug-3.0.1-py3-none-any.whl.metadata

Downloading werkzeug-3.0.1-py3-none-any.whl.metadata (4.1 kB)

Collecting Jinja2>=3.1.2 (from flask->-r requirments.txt (line 1))

Obtaining dependency information for Jinja2>=3.1.2 from https://files.pythonhosted.org/packages/30/6d/6de6be2d02603ab56e72997708809e8a5b0fbfee080735109b40a3564843/Jinja2-3.1.3-py3-none-any.whl.metadata

Downloading Jinja2-3.1.3-py3-none-any.whl.metadata (3.3 kB)

Collecting itsdangerous>=2.1.2 (from flask->-r requirments.txt (line 1))

Downloading itsdangerous-2.1.2-py3-none-any.whl (15 kB)

Collecting click>=8.1.3 (from flask->-r requirments.txt (line 1))

Obtaining dependency information for click>=8.1.3 from https://files.pythonhosted.org/packages/00/2e/d53fa4befbf2cfa713304affc7ca780ce4fc1fd8710527771b58311a3229/click-8.1.7-py3-none-any.whl.metadata

Downloading click-8.1.7-py3-none-any.whl.metadata (3.0 kB)

Collecting blinker>=1.6.2 (from flask->-r requirments.txt (line 1))

Obtaining dependency information for blinker>=1.6.2 from https://files.pythonhosted.org/packages/fa/2a/7f3714cbc6356a0efec525ce7a0613d581072ed6eb53eb7b9754f33db807/blinker-1.7.0-py3-none-any.whl.metadata

Downloading blinker-1.7.0-py3-none-any.whl.metadata (1.9 kB)

Collecting MarkupSafe>=2.0 (from Jinja2>=3.1.2->flask->-r requirments.txt (line 1))

Obtaining dependency information for MarkupSafe>=2.0 from https://files.pythonhosted.org/packages/2c/db/e20eb0899e6cfc0bc51c21d0b62fb138f5e014443c340cacbd250768b968/MarkupSafe-2.1.4-cp312-cp312-manylinux\_2\_17\_x86\_64.manylinux2014\_x86\_64.whl.metadata

Downloading MarkupSafe-2.1.4-cp312-cp312-manylinux\_2\_17\_x86\_64.manylinux2014\_x86\_64.whl.metadata (3.0 kB)

Downloading flask-3.0.1-py3-none-any.whl (101 kB)

━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 101.2/101.2 kB 797.9 kB/s eta 0:00:00

Downloading blinker-1.7.0-py3-none-any.whl (13 kB)

Downloading click-8.1.7-py3-none-any.whl (97 kB)

━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 97.9/97.9 kB 1.4 MB/s eta 0:00:00

Downloading Jinja2-3.1.3-py3-none-any.whl (133 kB)

━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 133.2/133.2 kB 2.1 MB/s eta 0:00:00

Downloading werkzeug-3.0.1-py3-none-any.whl (226 kB)

━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━ 226.7/226.7 kB 2.7 MB/s eta 0:00:00

Downloading MarkupSafe-2.1.4-cp312-cp312-manylinux\_2\_17\_x86\_64.manylinux2014\_x86\_64.whl (28 kB)

Installing collected packages: MarkupSafe, itsdangerous, click, blinker, Werkzeug, Jinja2, flask

Successfully installed Jinja2-3.1.3 MarkupSafe-2.1.4 Werkzeug-3.0.1 blinker-1.7.0 click-8.1.7 flask-3.0.1 itsdangerous-2.1.2

WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv

[notice] A new release of pip is available: 23.2.1 -> 23.3.2

[notice] To update, run: pip install --upgrade pip

Removing intermediate container 58709c2d7940

---> 13a07f0f25b6

Step 5/6 : EXPOSE 5000

---> Running in 831fc574c67b

Removing intermediate container 831fc574c67b

---> 105de90f8813

Step 6/6 : CMD [ "flask", "run","--host","0.0.0.0","--port","5000"]

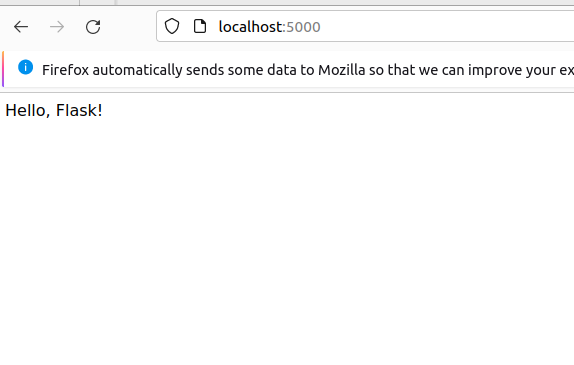
---> Running in 1ab1115e6ea5

Removing intermediate container 1ab1115e6ea5

---> 6d0896eadb48

Successfully built 6d0896eadb48

Successfully tagged flaskapps:latest



ADD TO GITHUB

root@devops:/home/devops/devops\_docker# git config --global user.name "imedB1988"

root@devops:/home/devops/devops\_docker# git config --global user.email [benzimededdine@gmail.com](mailto:benzimededdine@gmail.com)

root@devops:/home/devops/devops\_docker# git config --list

user.name=imedB1988

[user.email=benzimededdine@gmail.com](mailto:user.email%3Dbenzimededdine@gmail.com)

root@devops:/home/devops/devops\_docker# git init

hint: Using 'master' as the name for the initial branch. This default branch name

hint: is subject to change. To configure the initial branch name to use in all

hint: of your new repositories, which will suppress this warning, call:

hint:

hint: git config --global init.defaultBranch <name>

hint:

hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and

hint: 'development'. The just-created branch can be renamed via this command:

hint:

hint: git branch -m <name>

Initialized empty Git repository in /home/devops/devops\_docker/.git/

root@devops:/home/devops/devops\_docker# git add .

root@devops:/home/devops/devops\_docker# git status

On branch master

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: flaskapp/Dockerfile

new file: flaskapp/app.py

new file: flaskapp/requirments.txt

new file: gocode/Dockerfile

new file: gocode/go.mod

new file: gocode/go.sum

new file: gocode/server.go

root@devops:/home/devops/devops\_docker# git commit -m "Committing golang and flask changes"

[master (root-commit) c24221d] Committing golang and flask changes

7 files changed, 148 insertions(+)

create mode 100644 flaskapp/Dockerfile

create mode 100755 flaskapp/app.py

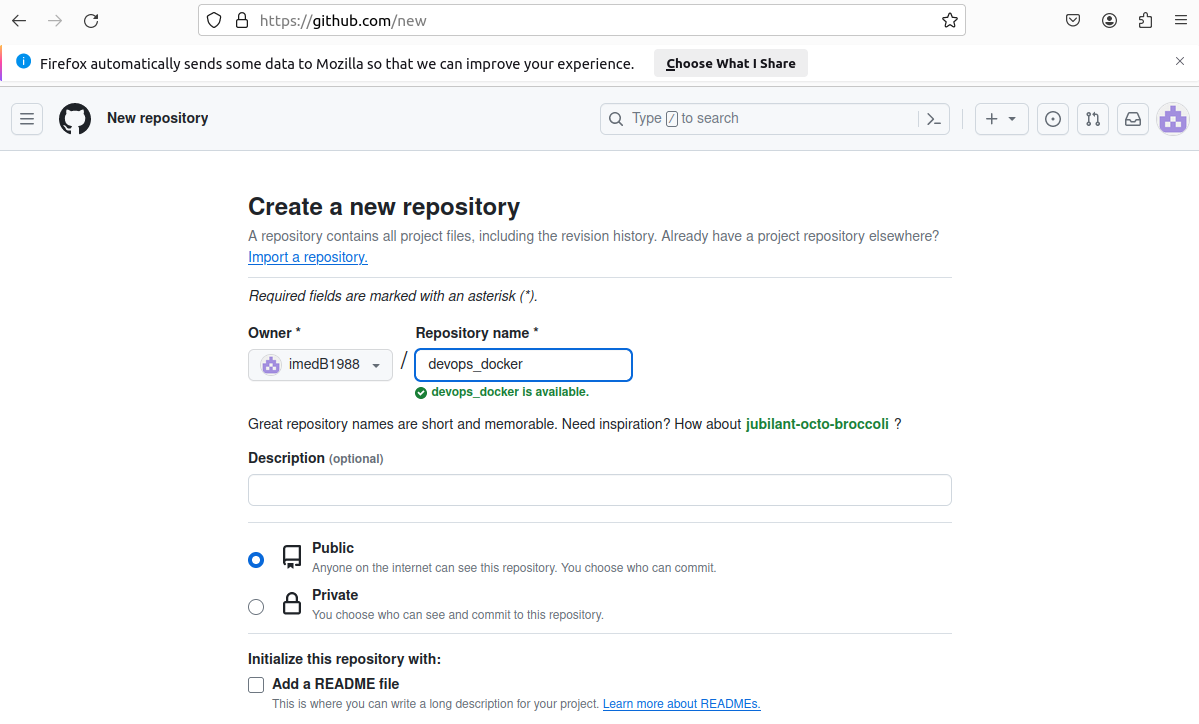
create mode 100755 flaskapp/requirments.txt

create mode 100644 gocode/Dockerfile

create mode 100755 gocode/go.mod

create mode 100755 gocode/go.sum

create mode 100755 gocode/server.go



root@devops:/home/devops/devops\_docker# git remote add origin https://github.com/imedB1988/devops\_docker.git

root@devops:/home/devops/devops\_docker# git remote --verbose

origin https://github.com/imedB1988/devops\_docker.git (fetch)

origin https://github.com/imedB1988/devops\_docker.git (push)

root@devops:/home/devops/devops\_docker# git push origin master

Username for 'https://github.com': imedB1988

Password for 'https://imedB1988@github.com':root@devops:/home/devops/devops\_docker# git push origin master

Username for 'https://github.com': imedB1988

Password for 'https://imedB1988@github.com':root@devops:/home/devops/devops\_docker# git push origin master

Username for 'https://github.com': imedB1988

Password for 'https:[//imedB1988@github.com](mailto://imedB1988@github.com)':

Enumerating objects: 11, done.

Counting objects: 100% (11/11), done.

Delta compression using up to 2 threads

Compressing objects: 100% (10/10), done.

Writing objects: 100% (11/11), 3.85 KiB | 1.92 MiB/s, done.

Total 11 (delta 1), reused 0 (delta 0), pack-reused 0

remote: Resolving deltas: 100% (1/1), done.

To https://github.com/imedB1988/devops\_docker.git

\* [new branch] master -> master

