Indicamos su nombre, el mapeo de puertos, el bind mount y la imagen que va a usar.

```
estudiante@DAW1:~$ docker run -d --name HTTPS -v \home\estudiante\httpGit:/usr/lcoal/apache2/htdocs -p 80:80 -p 443:443 httpd:2.4
ffdf9438087cf972a044be1ce9451d6236431bae5a15a2e8e0b3afafaecd2843
```

Generación del certificado SSL

```
estudiante@DAW1:~$ docker exec -it ffdf9438087cf972a044be1ce9451d6236431bae5a15a
2e8e0b3afafaecd2843 /bin/bash
root@ffdf9438087c:/usr/local/apache2# apt-get update
Get:1 http://deb.debian.org/debian bullseye InRelease [116 kB]
Get:2 http://deb.debian.org/debian-security bullseye-security InRelease [48.4 kB
Get:3 http://deb.debian.org/debian bullseye-updates InRelease [44.1 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 Packages [8184 kB]
Get:5 http://deb.debian.org/debian-security bullseye-security/main amd64 Package
s [194 kB]
Get:6 http://deb.debian.org/debian bullseye-updates/main amd64 Packages [14.6 kB
Fetched 8600 kB in 2s (4301 kB/s)
Reading package lists... Done
root@ffdf9438087c:/usr/local/apache2# apt-get install openssl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssl is already the newest version (1.1.1n-0+deb11u3).
openssl set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.
```

Generamos la clave

```
root@ffdf9438087c:/usr/local/apache2/conf# openssl req -x509 -day 365 -newkey rs
a:2048 -keyout server.key -out server.crt
req: Unrecognized flag day
req: Use -help for summary.
root@ffdf9438087c:/usr/local/apache2/conf# openssl req -x509 -days 365 -newkey r
sa:2048 -keyout server.key -out server.crt
Generating a RSA private key
writing new private key to 'server.key'
Enter PEM pass phrase:
Verifying - Enter PEM pass phrase:
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
Country Name (2 letter code) [AU]:
```

Insertamos información

```
Country Name (2 letter code) [AU]:ES

State or Province Name (full name) [Some-State]:Seville

Locality Name (eg, city) []:Seville

Organization Name (eg, company) [Internet Widgits Pty Ltd]:Chavales

Organizational Unit Name (eg, section) []:Chavales

Common Name (e.g. server FQDN or YOUR name) []:Fer

Email Address []:fernandozamorarico@gmail.com

root@ffdf9438087c:/usr/local/apache2/conf#
```

Habilitamos HTTPS.

```
root@ffdf9438087c:/usr/local/apache2/conf# apt-get install nano
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libgpm2 libncursesw6
Suggested packages:
 gpm hunspell
The following NEW packages will be installed:
 libgpm2 libncursesw6 nano
O upgraded, 3 newly installed, O to remove and 3 not upgraded.
Need to get 824 kB of archives.
After this operation, 3087 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://deb.debian.org/debian bullseye/main amd64 libncursesw6 amd64 6.2+20
201114-2 [132 kB]
Get:2 http://deb.debian.org/debian bullseye/main amd64 nano amd64 5.4-2+deb11u1
[656 kB]
Get:3 http://deb.debian.org/debian bullseye/main amd64 libgpm2 amd64 1.20.7-8 [3
5.6 kBl
Fetched 824 kB in 0s (6145 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package libncursesw6:amd64.
(Reading database ... 7140 files and directories currently installed.)
```

Editamos el fichero httpd.conf con nano

```
# Various default settings
#Include conf/extra/httpd-default.conf

# Configure mod_proxy_html to understand HTML4/XHTML1
<IfModule proxy_html_module>
Include conf/extra/proxy-html.conf
</IfModule>

# Secure (SSL/TLS) connections
Include conf/extra/httpd-ssl.conf

# Note: The following must must be present to support

# starting without SSL on platforms with no /dev/random equivalent

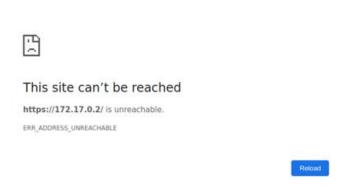
# but a statically compiled-in mod_ssl.

# <IfModule ssl_module>
SSLRandomSeed startup builtin
SSLRandomSeed connect builtin
</IfModule>
```

Por último, reiniciamos el servicio apache

```
root@ffdf9438087c:/usr/local/apache2/conf# apachectl restart
AH00558: httpd: Could not reliably determine the server's fully qualified domain
name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress thi
s message
root@ffdf9438087c:/usr/local/apache2/conf# estudiante@DAW1:~$
```

Antes se veía así pero después de volver a realizarlo en casa, sale correctamente



En realidad, se tendría que ver así, pero tendríamos que dar permiso al navegador para que acceda a la página.

