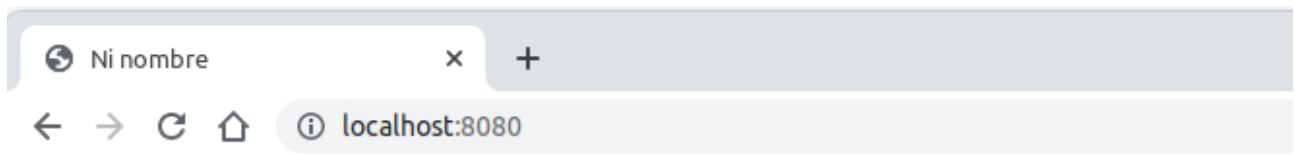


Practica 2

César Muñoz Reinoso

```
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2$ sudo docker build -t ejer1 .
Sending build context to Docker daemon 3.072kB
Step 1/9 : FROM debian
----> 82bd5ee7b1c5
Step 2/9 : MAINTAINER Usuario CPD "cesarmunoz@ugr.es"
----> Using cache
----> 8896e40410b0
Step 3/9 : RUN apt-get update && apt-get install -y apache2 && apt-get clean && rm -rf /var/lib/apt/lists/*
----> Using cache
----> 5f4d4539a957
Step 4/9 : ENV APACHE_RUN_USER www-data
----> Using cache
----> 7bf976e2e160
Step 5/9 : ENV APACHE_RUN_GROUP www-data
----> Using cache
----> 71cf96a3fdb0
Step 6/9 : ENV APACHE_LOG_DIR /var/log/apache2
----> Using cache
----> 562268833c09
Step 7/9 : EXPOSE 80
----> Using cache
----> 8d6da2f579d4
Step 8/9 : ADD ["index.html", "/var/www/html/"]
----> d23c378ad95c
Step 9/9 : ENTRYPOINT ["/usr/sbin/apache2ctl", "-D", "FOREGROUND"]
----> Running in 6ec2a129139b
Removing intermediate container 6ec2a129139b
----> 782a1eb305ed
Successfully built 782a1eb305ed
Successfully tagged ejer1:latest
```

```
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2$ sudo docker run --name x1 -p8080:80 -d ejer1
c1a6d966189d44ff629e8b040350a240684d34a9037cce6a71dcc66c87601886
```



Cesar Muñoz Reinoso

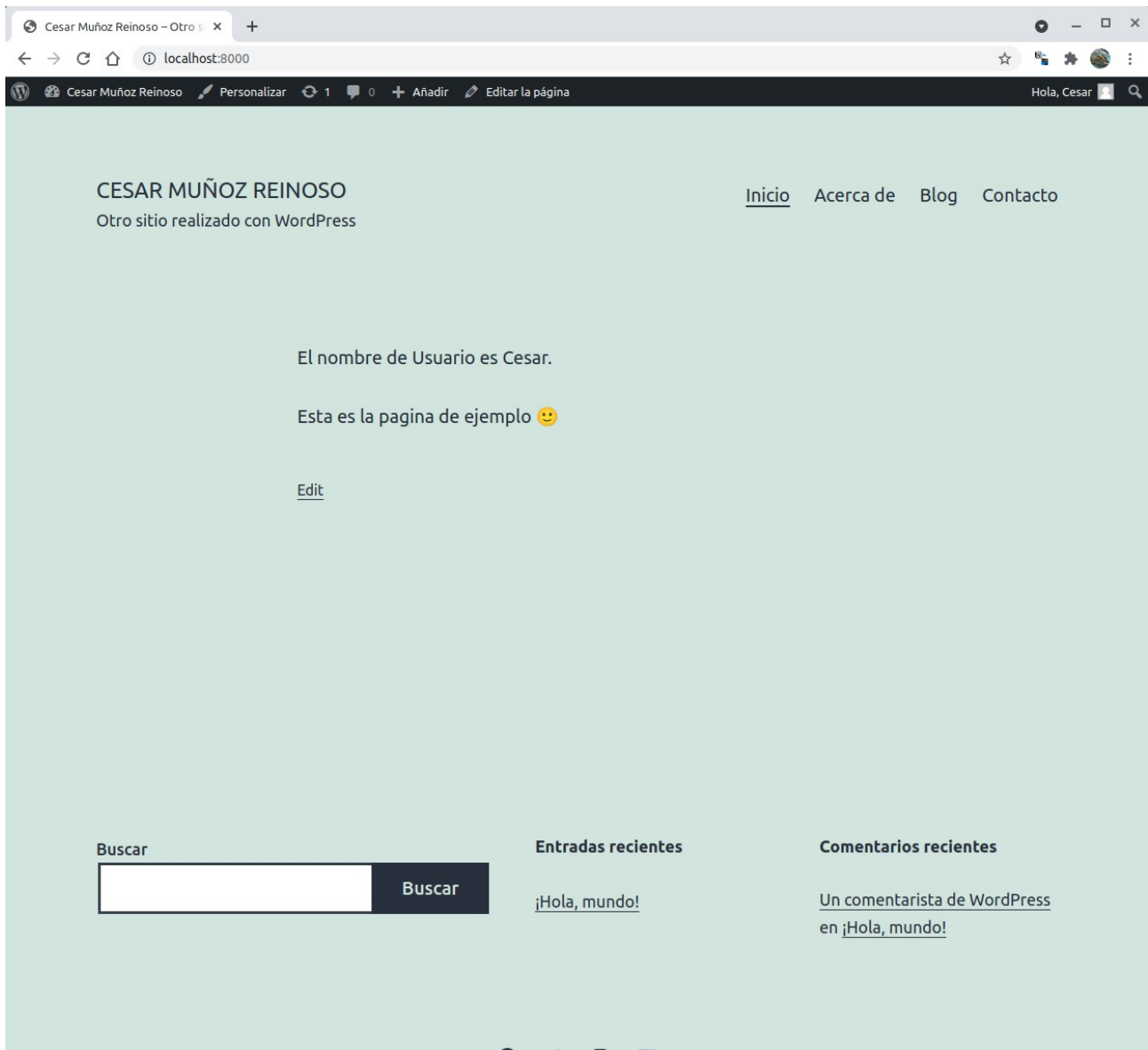
```
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2$ sudo docker login
Authenticating with existing credentials...
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2$ sudo docker build -t kellnar/pr2:1.0 .
Sending build context to Docker daemon 4.608kB
Step 1/9 : FROM debian
--> 82bd5ee7b1c5
Step 2/9 : MAINTAINER Usuario CPD "cesarmunoz@ugr.es"
--> Using cache
--> 8896e40410b0
Step 3/9 : RUN apt-get update && apt-get install -y apache2 && apt-get clean && rm -rf /var/lib/apt/lists/*
--> Using cache
--> 5f4d4539a957
Step 4/9 : ENV APACHE_RUN_USER www-data
--> Using cache
--> 7bf976e2e160
Step 5/9 : ENV APACHE_RUN_GROUP www-data
--> Using cache
--> 71cf96a3fdb0
Step 6/9 : ENV APACHE_LOG_DIR /var/log/apache2
--> Using cache
--> 562268833c09
Step 7/9 : EXPOSE 80
--> Using cache
--> 8d6da2f579d4
Step 8/9 : ADD ["index.html","/var/www/html/"]
--> Using cache
--> d23c378ad95c
Step 9/9 : ENTRYPOINT ["/usr/sbin/apache2ctl", "-D", "FOREGROUND"]
--> Using cache
--> 782a1eb305ed
Successfully built 782a1eb305ed
Successfully tagged kellnar/pr2:1.0
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2$ sudo docker push kellnar/pr2:1.0
The push refers to repository [docker.io/kellnar/pr2]
9a3279d93e2d: Pushed
39d0894440b4: Pushed
799760671c38: Mounted from library/debian
1.0: digest: sha256:20e5f4e49217750ba8ae9d62448618f38b62c6e1b9c0ffd597d9b8832e2fb27f size: 948
```

Nombre de la imagen : pr2

```
Dockerfile x
FROM debian
MAINTAINER Usuario CPD "cesarmunoz@ugr.es"
RUN apt-get update && apt-get install -y apache2 && apt-get clean && rm -rf /var/lib/apt/lists/*
ENV APACHE_RUN_USER www-data
ENV APACHE_RUN_GROUP www-data
ENV APACHE_LOG_DIR /var/log/apache2
EXPOSE 80
ADD ["index.html","/var/www/html/"]
ENTRYPOINT ["/usr/sbin/apache2ctl", "-D", "FOREGROUND"]
```

```
index.html x
<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <title>Ni nombre</title>
</head>
<body>
  <h1>Cesar Muñoz Reinoso</h1>
</body>
</html>
```



Creamos el contenedor

```
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2/testcpu$ sudo docker build -t kellnar/testcpu:1.0 .
Sending build context to Docker daemon 2.048kB
Step 1/2 : FROM alpine:3.8
--> c8bccc0af957
Step 2/2 : RUN apk update && apk add curl && apk add vim && apk add git
--> Running in f426bcfe166f
fetch http://dl-cdn.alpinelinux.org/alpine/v3.8/main/x86_64/APKINDEX.tar.gz
fetch http://dl-cdn.alpinelinux.org/alpine/v3.8/community/x86_64/APKINDEX.tar.gz
v3.8.5-67-gf94de196ca [http://dl-cdn.alpinelinux.org/alpine/v3.8/main]
v3.8.5-66-gccbd6a8ae7 [http://dl-cdn.alpinelinux.org/alpine/v3.8/community]
OK: 9564 distinct packages available
(1/5) Installing ca-certificates (20191127-r2)
(2/5) Installing nghttp2-libs (1.39.2-r0)
(3/5) Installing libssh2 (1.9.0-r1)
(4/5) Installing libcurl (7.61.1-r3)
(5/5) Installing curl (7.61.1-r3)
Executing busybox-1.28.4-r3.trigger
Executing ca-certificates-20191127-r2.trigger
OK: 6 MiB in 18 packages
(1/5) Installing lua5.3-libs (5.3.5-r2)
(2/5) Installing ncurses-terminfo-base (6.1_p20180818-r1)
(3/5) Installing ncurses-terminfo (6.1_p20180818-r1)
(4/5) Installing ncurses-libs (6.1_p20180818-r1)
(5/5) Installing vim (8.1.1365-r0)
Executing busybox-1.28.4-r3.trigger
OK: 41 MiB in 23 packages
(1/3) Installing expat (2.2.8-r0)
(2/3) Installing pcre2 (10.31-r0)
(3/3) Installing git (2.18.4-r0)
Executing busybox-1.28.4-r3.trigger
OK: 54 MiB in 26 packages
Removing intermediate container f426bcfe166f
--> ffbcdb5ddfad
Successfully built ffbcdb5ddfad
Successfully tagged kellnar/testcpu:1.0
```

Limitamos el uso de CPU y memoria

```
cesar@cesar-TM1701:~$ sudo docker run -it --cpu-period=50000 --cpu-quota=50000 --memory=4g kellnar/testcpu:1.0
WARNING: Your kernel does not support swap limit capabilities or the cgroup is not mounted. Memory limited without swap.
```

Ejecutamos systest

```
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2/testcpu$ sysbench --test=cpu --cpu-max-prime=20000 run
WARNING: the --test option is deprecated. You can pass a script name or path on the command line without any options.
sysbench 1.0.18 (using system LuaJIT 2.1.0-beta3)

Running the test with following options:
Number of threads: 1
Initializing random number generator from current time


Prime numbers limit: 20000

Initializing worker threads...

Threads started!

CPU speed:
  events per second:   505.62

General statistics:
  total time:          10.0003s
  total number of events: 5057

Latency (ms):
  min:                 1.95
  avg:                 1.98
  max:                 3.43
  95th percentile:    2.07
  sum:                 9999.27

Threads fairness:
  events (avg/stddev): 5057.0000/0.00
  execution time (avg/stddev): 9.9993/0.00
```

Lo subimos a docker hub

```
cesar@cesar-TM1701:~/Escritorio/CPD/Práctica/Practica 2/testcpu$ sudo docker push kellnar/testcpu:1.0
The push refers to repository [docker.io/kellnar/testcpu]
9845c3157127: Pushed
7444ea29e45e: Mounted from kellnar/cpd1
1.0: digest: sha256:9597669af326ebfad4162a24ccb9464c971f5010804c55db1bac2f4b3fdc99c2 size: 740
```