

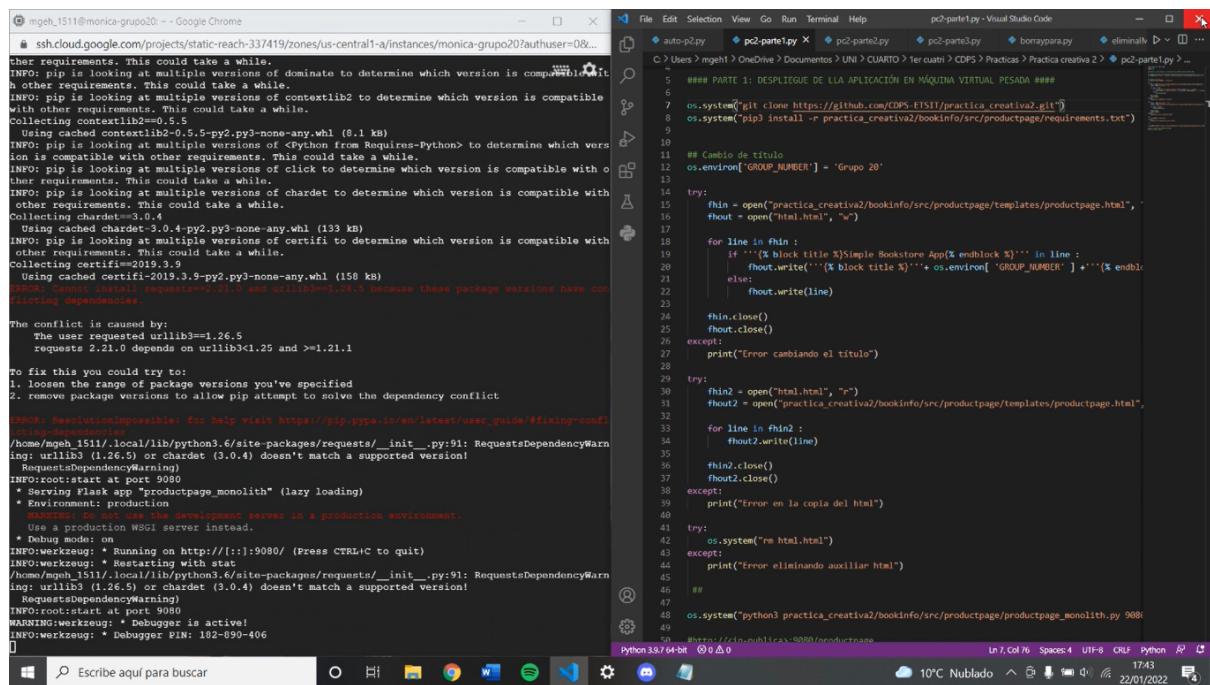
CDPS-PRÁCTICA CREATIVA 2

DESPLIEGUE DE UNA APLICACIÓN ESCALABLE

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Despliegue de la aplicación en máquina virtual pesada (2 puntos)

Aquí realizamos la parte 1 con un script de python donde editamos el fichero html.html para pasar como parámetro la variable de Group_number que luego se sustituye el valor en ese html para que salga el nombre del grupo como la cabecera del tab.



```
git: 'ssh.cloud.google.com/projects/static-reach-337419/zones/us-central1-a/instances/monica-grupo20?authuser=0x...' @ https://github.com/CDPS-ETSIIT/practica_creativa2.git#HEAD
    th requirements. This could take a while.
INFO: pip is looking at multiple versions of dominate to determine which version is compatible with other requirements. This could take a while.
INFO: pip is looking at multiple versions of contextlib2 to determine which version is compatible with other requirements. This could take a while.
INFO: pip is looking at multiple versions of click to determine which version is compatible with other requirements. This could take a while.
INFO: pip is looking at multiple versions of charsetet to determine which version is compatible with other requirements. This could take a while.
Collecting contextlib2==0.1.5
  Using cached contextlib2-0.1.5-py2.py3-none-any.whl (8.1 kB)
INFO: pip is looking at multiple versions of <python from Requirements-Python> to determine which version is compatible with other requirements. This could take a while.
INFO: pip is looking at multiple versions of certifi to determine which version is compatible with other requirements. This could take a while.
Collecting certifi==2019.3.9
  Using cached certifi-2019.3.9-py2.py3-none-any.whl (158 kB)
INFO: Could NOT find 'urllib3<1.21.0 and urllib3>1.26.5' because these package versions have conflicting dependencies
The conflict is caused by:
  The user requested urllib3==1.26.5
  requests<2.21.0 depends on urllib3<1.25 and >=1.21.0
To fix this you could try to:
1. loosen the range of package versions you've specified
2. remove package versions to allow pip attempt to solve the dependency conflict
INFO: ResolutionImpossible: For help visit https://pip.pypa.io/en/latest/user_guide/#fixing-conflicts
/home/mgh_1511/.local/lib/python3.6/site-packages/requests/_init_.py:91: RequestsDependencyWarning: urllib3 (1.26.5) or charset (3.0.4) doesn't match a supported version!
  RequestedDependencyWarning)
INFO:werkzeug: * Starting at port 9080
* Serving Flask app "productpage_monolith" (lazy loading)
* Environment: production
  WARNING: This is the development server. Use a production WSGI server instead.
* Debug mode: on
INFO:werkzeug: * Running on http://127.0.0.1:9080/ (Press CTRL+C to quit)
INFO:werkzeug: * Restarting with stat
/home/mgh_1511/.local/lib/python3.6/site-packages/requests/_init_.py:91: RequestsDependencyWarning: urllib3 (1.26.5) or charset (3.0.4) doesn't match a supported version!
  RequestedDependencyWarning)
INFO:werkzeug: * Debugger is active!
INFO:werkzeug: * Debugger PIN: 182-890-406
[...]
Windows PowerShell Escribe aquí para buscar 10°C Nublado 17:43 22/01/2022
```

```
File Edit Selection View Go Run Terminal Help pc2-part1.py - Visual Studio Code
auto-p2.py p2-part1.py x p2-part2.py p2-part3.py boraypara.py eliminav ...
C > Users > mgh_1511 > OneDrive - Documentos > UNI > CUARTO > 1er cuatr > CDPS > Practicas > Practica creativa 2 > pc2-part1.py ...
5 ##### PARTE 1: DESPLIEGUE DE LA APLICACIÓN EN MÁQUINA VIRTUAL PESADA #####
6
7 os.system("git clone https://github.com/CDPS-ETSIIT/practica_creativa2.git")
8 os.system("pip3 install -r practica_creativa2/bookinfo/src/productpage/requirements.txt")
9
10 ## Cambio de titulo
11 os.environ['GROUP_NUMBER'] = 'Grupo 20'
12
13 try:
14     ffin = open("practica_creativa2/bookinfo/src/productpage/templates/productpage.html",
15     ffout = open("html.html", "w")
16
17     for line in ffin:
18         if '%%( block title %%)' in line:
19             ffout.write('%%( block title %%)' + os.environ['GROUP_NUMBER'] + '%%( endblock %%')
20         else:
21             ffout.write(line)
22
23     ffin.close()
24     ffout.close()
25 except:
26     print("Error cambiando el titulo")
27
28 try:
29     fhin2 = open("html.html", "r")
30     fouth2 = open("practica_creativa2/bookinfo/src/productpage/templates/productpage.html",
31
32     for line in fhin2:
33         fouth2.write(line)
34
35     fhin2.close()
36     fouth2.close()
37 except:
38     print("Error en la copia del html")
39
40 try:
41     os.system("rm html.html")
42 except:
43     print("Error eliminando auxiliar html")
44
45 ##
46
47 os.system("python3 practica_creativa2/bookinfo/src/productpage/productpage_monolith.py 9080")
48
49 http://127.0.0.1:9080/productpage
Python 3.7.6 (64-bit) 0:0:0 17:43 22/01/2022
```

Observamos cómo sale el resultado correctamente:

```
mgeh_1511@monica-grupo20: ~ - Google Chrome
ssh.cloud.google.com/projects/static-reach-337419/zones/us-central1-a/instances/monica-grupo20authuser=0...
1. loosen the range of package versions you've specified
2. remove package versions to allow pip attempt to solve the dependency conflict

ERROR: ResolutionImpossible: For help visit https://pip.pypa.io/en/latest/user_guide/#fixing-conflicts
/home/mgeh_1511/.local/lib/python3.6/site-packages/requests/_init_.py:91: RequestsDependencyWarning
  RequestsDependencyWarning)
INFO:root:start at port 9080
* Serving Flask app "productpage_monolith" (lazy loading)
* Environment: production
  * Running on the development server in a production environment.
    Use a production WSGI server instead.
* Debug mode: on
INFO:werkzeug: * Running on http://:9080/ (Press CTRL+C to quit)
INFO:werkzeug: * Restarting with stat
/home/mgeh_1511/.local/lib/python3.6/site-packages/requests/_init_.py:91: RequestsDependencyWarning
  RequestsDependencyWarning)
INFO:root:start at port 9080
WARNING:werkzeug: * Debugger PIN: 182-890-406
INFO:werkzeug: * Debugger PIN: 182-890-406
http://details:9080/details/OAA
qisbn:0486424618
DEBUG:urllib3.connectionpool:Starting new HTTP connection (1): www.googleapis.com:443
send: b'GET /books/v1/volumes?qisbn:0486424618 HTTP/1.1\r\nHost: www.googleapis.com\r\nUser-Agent: python-requests/2.21.0\r\nAccept-Encoding: gzip, deflate\r\nAccept: */*\r\nConnection: keep-alive\r\n\r\n'
reply: 'HTTP/1.1 200 OK\r\n'
headers: Content-Type: application/json; charset=UTF-8
headers: Vary: Origin
headers: X-Content-Type-Options: SANDBOX
headers: X-Frame-Options: SAMEORIGIN
headers: X-Content-Type-Options: nosniff
headers: Transfer-Encoding: chunked
DEBUG:urllib3.connectionpool:https://www.googleapis.com:443 "GET /books/v1/volumes?qisbn:0486424618"
18 HTTP/1.1" 200 None
URL https://www.googleapis.com/books/v1/volumes?qisbn:0486424618
DEBUG:urllib3.connectionpool:Starting new HTTP connection (1): reviews:9080
DEBUG:urllib3.connectionpool:Starting new HTTP connection (1): reviews:9080
INFO:werkzeug::ffff:176.83.168.228 - [22/Jan/2022 16:44:03] "GET /productpage?u=normal HTTP/1.1" 200 -
"200"
"mgeh_1511@monica-grupo20: ~"
mgeh_1511@monica-grupo20: ~
```

Escribe aquí para buscar

Resumen: Wikipedia Resumen : La comedia de los errores es una de las primeras obras de William Shakespeare . Es su comedia más corta y una de sus más ridículas, con una gran parte del humor proveniente de payasadas e identidad equivocada, además de juegos de palabras y juegos de palabras.

Detalles del libro

Escribe:
libro de bolsillo
Páginas:
53
Editor:
Corporación de mensajería
Idioma:
inglés
ISBN-10:
9780486424613
ISBN-13:
9780486424613

Reseñas de libros

```
mgeh_1511@monica-grupo20: ~ - Google Chrome
ssh.cloud.google.com/projects/static-reach-337419/zones/us-central1-a/instances/monica-grupo20authuser=0...
To fix this you could try to:
1. loosen the range of package versions you've specified
2. remove package versions to allow pip attempt to solve the dependency conflict

ERROR: ResolutionImpossible: For help visit https://pip.pypa.io/en/latest/user_guide/#fixing-conflicts
/home/mgeh_1511/.local/lib/python3.6/site-packages/requests/_init_.py:91: RequestsDependencyWarning
  RequestsDependencyWarning)
INFO:root:start at port 9080
* Serving Flask app "productpage_monolith" (lazy loading)
* Environment: production
  * Running on the development server in a production environment.
    Use a production WSGI server instead.
* Debug mode: on
INFO:werkzeug: * Running on http://:9080/ (Press CTRL+C to quit)
INFO:werkzeug: * Restarting with stat
/home/mgeh_1511/.local/lib/python3.6/site-packages/requests/_init_.py:91: RequestsDependencyWarning
  RequestsDependencyWarning)
INFO:root:start at port 9080
WARNING:werkzeug: * Debugger is active!
INFO:werkzeug: * Debugger PIN: 182-890-406
INFO:werkzeug: * Debugger PIN: 182-890-406
http://details:9080/details/OAA
qisbn:0486424618
DEBUG:urllib3.connectionpool:Starting new HTTP connection (1): www.googleapis.com:443
send: b'GET /books/v1/volumes?qisbn:0486424618 HTTP/1.1\r\nHost: www.googleapis.com\r\nUser-Agent: python-requests/2.21.0\r\nAccept-Encoding: gzip, deflate\r\nAccept: */*\r\nConnection: keep-alive\r\n\r\n'
reply: 'HTTP/1.1 200 OK\r\n'
headers: Content-Type: application/json; charset=UTF-8
headers: Vary: Origin
headers: X-Content-Type-Options: SANDBOX
headers: X-Frame-Options: SAMEORIGIN
headers: X-Content-Type-Options: nosniff
headers: Transfer-Encoding: chunked
DEBUG:urllib3.connectionpool:https://www.googleapis.com:443 "GET /books/v1/volumes?qisbn:0486424618"
18 HTTP/1.1" 200 None
URL https://www.googleapis.com/books/v1/volumes?qisbn:0486424618
DEBUG:urllib3.connectionpool:Starting new HTTP connection (1): reviews:9080
DEBUG:urllib3.connectionpool:Starting new HTTP connection (1): reviews:9080
INFO:werkzeug::ffff:176.83.168.228 - [22/Jan/2022 18:55:30] "GET /productpage HTTP/1.1" 200 -
"1955"
"mgeh_1511@monica-grupo20: ~"
mgeh_1511@monica-grupo20: ~
```

Escribe aquí para buscar

Resumen: Wikipedia Resumen : La comedia de los errores es una de las primeras obras de William Shakespeare . Es su comedia más corta y una de sus más ridículas, con una gran parte del humor proveniente de payasadas e identidad equivocada, además de juegos de palabras y juegos de palabras.

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Reseñas de libros

Activación de la política de seguridad del firewall para que habilite correctamente las conexiones al puerto 9080:

The screenshot shows the Google Cloud Platform Firewall interface for a project named 'My First Project'. The left sidebar has sections like 'Redes de VPC', 'Direcciones IP externas', 'Usa tu propia IP', 'Firewall' (selected), 'Rutas', 'Intercambio de tráfico entre...', 'VPC compartida', 'Acceso a VPC sin servidores', and 'Duplicación de paquetes'. The main area displays a table of firewall rules:

Nombre	Tipo	Destinos	Filtros	Protocolos/puertos	Acción	Prioridad	Red ↑	Registros	Reuento de hits	Últim
default-allow-htt	Entrada	http-server	Intervalos de	tcp:80	Permitir	1000	default	Desactivado	-	-
default-allow-https	Entrada	https-server	Intervalos de	tcp:443	Permitir	1000	default	Desactivado	-	-
https-9080	Entrada	https-server	Intervalos de IP:	0.0.0.0/0	Permitir	1000	default	Activado	0	No h
default-allow-icmp	Entrada	Aplicar a todo	Intervalos de	icmp	Permitir	65534	default	Desactivado	-	-
default-allow-internal	Entrada	Aplicar a todo	Intervalos de	tcp:0-65535 udp:0-65535 icmp	Permitir	65534	default	Desactivado	-	-
default-allow-rdp	Entrada	Aplicar a todo	Intervalos de	tcp:3389	Permitir	65534	default	Desactivado	-	-
default-allow-ssh	Entrada	Aplicar a todo	Intervalos de	tcp:22	Permitir	65534	default	Desactivado	-	-

Despliegue de una aplicación monolítica usando docker (2 puntos)

Aquí realizamos la parte 2 con un script de python donde definimos la imagen, su Dockerfile y arrancamos el contenedor.

The terminal window shows the execution of a Python script (pc2-parte2.py) which runs several commands to build and run a Docker container. The output includes:

- Building wheels for visitor (setup.py): started
- Building wheel for visitor (setup.py): finished with status 'done'
- Created wheel for visitor: filename=visitor-0.1.3-py3-none-any.whl size=3931 sha256=d03a6280b95d51a421c308a5ee071aa92c437edcd9ac4e467d23b30b3be65
- Stored in directory: /root/.cache/pip/wheels/64/34/11/053f47218984c9a31a0f91led98d0a36b867481dcc52fa12
- Building wheel for wrapt (setup.py): started
- Building wheel for wrapt (setup.py): finished with status 'done'
- Created wheel for wrapt: filename=wrapt-1.11.1-cp37-cp37m-linux_x86_64.whl size=33195 sha256=6643c6cd6376ab993ab1cfc732ab9e4cd5cd66a9aa1ab7d56db5306
- Stored in directory: /root/.cache/pip/wheels/4e/58/9d/da8bad4545858ca52311498fbf677647c95c7b690b304011f8
- Successfully built Flask-Bootstrap Flask-JSON future jaeger-client json2html MarkupSafe opentracing opentracing-instrumentation simplejson threadloop thrift tornado visitor wrapt
- Requirement 'requests<21.0' has requirement 'urllib3<1.21.1', but you'll have urllib3 1.26.5 which is incompatible.
- Installing collected packages: certifi, chardet, Click, contextlib2, dominate, itsdangerous, Werkzeug, MarkupSafe, Jinja2, Flask, visitor, Flask-Bootstrap, Flask-JSON, future, futures, greenlet, gevent, idna, tornado, threadloop, six, thrift, opentracing, jaeger-client, json2html, nose, wrapt, opentracing-instrumentation, urllib3, requests, simplejson
- Successfully installed Click-1.0.2 Flask-Bootstrap-3.3.7.1 Flask-JSON-0.3.3 Jinja2-2.1.1 MarkupSafe-1.1.1 Werkzeug-1.0.2 itsdangerous-1.1.0 nose-2.1.0 opentracing-1.2.0 opentracing-instrumentation-2.4.3 requests-2.21.0 simplejson-3.16.0 six-1.12.0 threadloop-1.0.2 thrift-0.11.0 tornado-4.5.3 urllib3-1.26.5 visitor-0.1.3 wrapt-1.11.1
- WARNING: You are using pip version 20.1.1; however, version 21.1.1 is available.
You should consider upgrading via the '/usr/local/bin/python -m pip install --upgrade pip' command.
- Removing intermediate container cc125cc3d0db
-> 980a3eaa123
- Step 11/13 : EXPOSE 9080
--> Running in a70189a87354
- Removing intermediate container a70189a87354
-> 82e90a1375fe
- Step 12/13 : ENV GROUP_NUMBER = 'Grupo 20'
--> Running in ec1240b76dc
- Removing intermediate container ec324b0b76dc
-> 5d4393da13d7
- Step 13/13 : CMD ["python3", "productpage_monolith.py", "9080"]
--> Running in e82d19e2939e1c9ddae0077e75b46ff4ebf4656ff2d60a6bfba00154198072d1
- Successfully built da2fae6b135
Successfully tagged q20/productpage:latest
e82d19e2939e1c9ddae0077e75b46ff4ebf4656ff2d60a6bfba00154198072d1

Observamos cómo sale el resultado correctamente:

```
mgeh_1511@monica-grupo02: ~ - Google Chrome
@ ssh.cloud.google.com/projects/static-reach-337419/zones/us-central1-a/instances/monica-grupo20?authuser=...
5e-e4f1b83098751fdd18ec3de170b6dd903750d94ad18de4e02996
Stored in directory: /root/.cache/pip/wheels/a2/45/43/36ecfa893e16c1212a6b1505ded0a2f5ccf63
a0227e0e4
Building wheel for visitor (setup.py): started
Building wheel for visitor (setup.py): finished with status 'done'
Created wheel for visitor: filename=visitor-0.1.3-py3-none-any.whl size=3931 sha256=d03a6280b9
d531a421c308a5ee071aa92c437edcd9ac4e467423b30b5be65
Stored in directory: /root/.cache/pip/wheels/e4/34/11/053f47218984c931a00f91led98dd036b86748
1dcc527a12
Building wheel for wrapt (setup.py): started
Building wheel for wrapt (setup.py): finished with status 'done'
Created wheel for wrapt: filename=wrapt-1.11.1-cp37-cp37m-linux_x86_64.whl size=33195 sha256=7
6643c6dc6376ab993ab1fcfe732ab9e46d5cd69a3a1ab7d56db5306
Stored in directory: /root/.cache/pip/wheels/4e/58/9d/da8bad4545585ca52311498ff677647c95c7b690
b304011f8
Successfully built Flask-Bootstrap Flask-JSON future jaeger-client json2html MarkupSafe opentracing opentracing-instrumentation simplejson threadloop thrift tornado visitor wrapt
WARNING: You are using pip version 20.1.1; however, version 21.3.1 is available.
You should consider upgrading via the '/usr/local/bin/python -m pip install --upgrade pip' command.
Removing intermediate container cc125cc3d0db
--> 980a3eaas123
Step 11/13 : EXPOSE 9080
--> Running in a70199a87354
Removing intermediate container a70199a87354
--> Step 12/13 : ENV GROUP_NUMBER = 'Grupo 20'
--> Running in ec324b0b76dc
Removing intermediate container ec324b0b76dc
--> 5d4393da13d7
Step 13/13 : CMD [ "python3", "productpage_monolith.py", "9080" ]
--> Running in 82e90a1375fe
Removing intermediate container 82e90a1375fe
--> 5d4393da13d7
Successfully built da2fae68b135
Successfully tagged g20/productpage:latest
e8d219e239e1c9d9e077e75b046ff4ebf4ebf4656ff2d60a6bfba0c0154198072d1
mgeh_1511@monica-grupo02: ~
```

Ejemplo de información del libro

Registrarse

La comedia de los errores

Resumen: Wikipedia Resumen: La comedia de los errores es una de las primeras obras de William Shakespeare . Es su comedia más corta y una de sus más ridículas, con una gran parte del humor proveniente de payasadas e identidad equivocada, además de juegos de palabras y juegos de palabras.

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inglés

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9780486424613

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9780486424613

Reseñas de libros

The Comedy of Errors

Summary: Wikipedia Summary: The Comedy of Errors is one of William Shakespeare's early plays. It is his shortest and one of his most farcical comedies, with a major part of the humour coming from slapstick and mistaken identity, in addition to puns and word play.

Book Details

Type: paperback

Pages: 53

Publisher: Courier Corporation

Language: English

ISBN-10: 9780486424613

ISBN-13: 9780486424613

Book Reviews

Comando despliegue del contenedor:

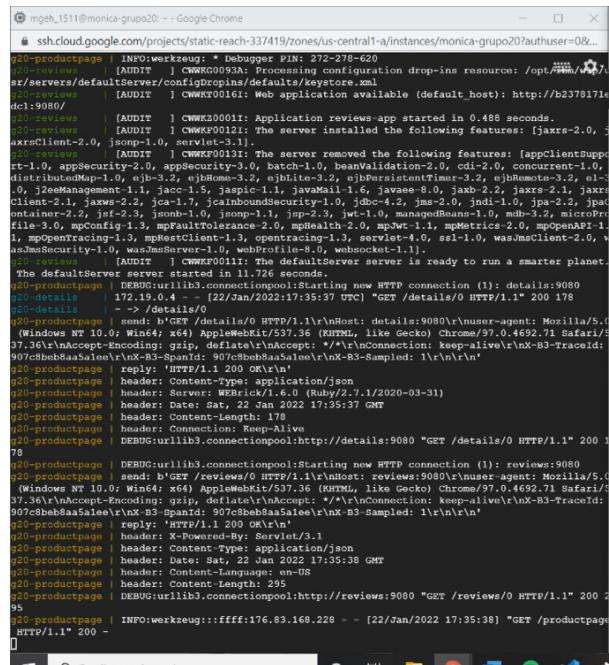
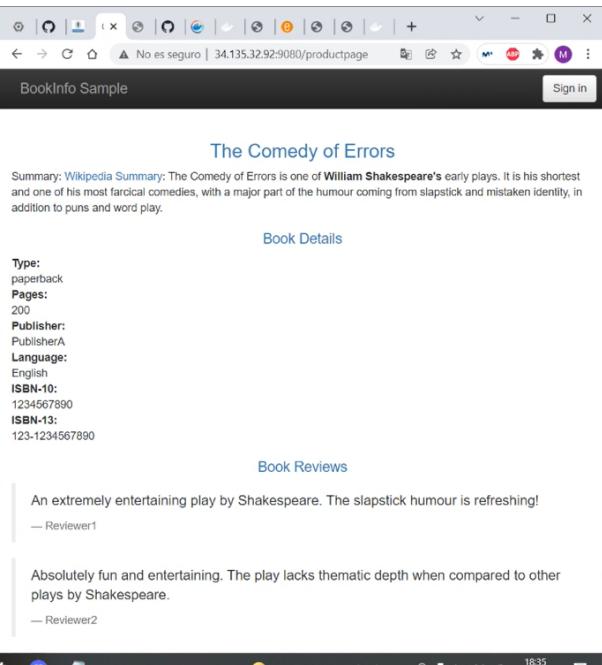
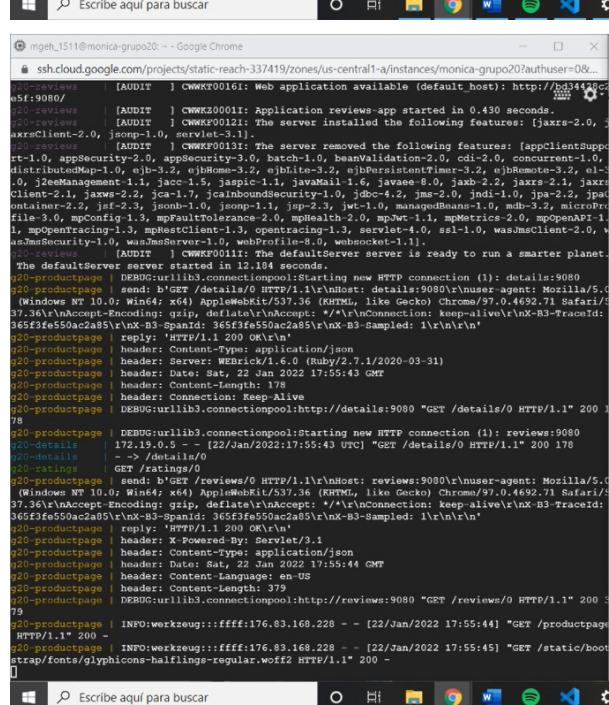
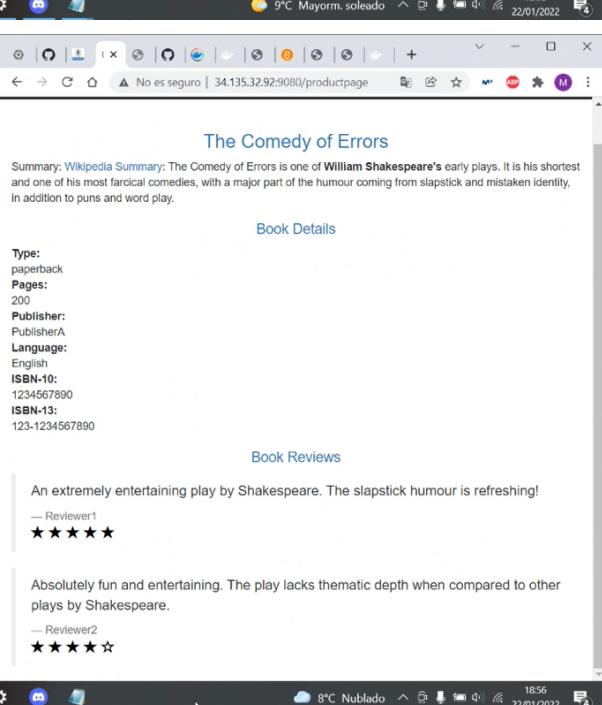
```
sudo docker run --name g20-productpage -p 80:9080 -e GROUP_NUMBER=20 -d
g20/productpage
```

Segmentación de una aplicación monolítica en microservicios utilizando docker-compose.(2 puntos)

Aquí definimos 6 imágenes en total para cumplir todos los servicios. Siendo 3 imágenes de reviews para tener 3 versiones diferentes de la página.

Creamos todo el script para que cree por definido la versión 1 aunque tenemos 2 scripts para cambiar todas las variables de entorno y re-runear para obtener las diferentes

opciones. Aquí vemos los resultados siendo diferente el color de las estrellas al cambiar el color a negro en la v2 y rojo en v3, estando activada la variable de entorno de enable ratings para v2 y v3:

The screenshot shows a Linux desktop environment. On the left, a terminal window displays log output from a Docker container. The log includes various audit messages, connection details, and requests for reviews and product pages. On the right, a web browser window titled 'Grupo 20' shows the Wikipedia summary for 'The Comedy of Errors'. The summary describes it as one of William Shakespeare's early plays, known for its slapstick humor and wordplay. Below the summary, there are sections for 'Book Details' (Type: paperback, Pages: 200, Publisher: PublisherA, Language: English, ISBN-10: 1234567890, ISBN-13: 123-1234567890) and 'Book Reviews' (two reviews, both rated 5 stars). At the bottom of the screen, there is a system tray with icons for weather, battery, and date/time.

```

mgeh_1511@monica-grupo20: ~ - Google Chrome
ssh.cloud.google.com/projects/static-reach-337419/zones/us-central1-a/instances/monica-grupo20authuser-0X...
[...]
[AUDIT] CWWF0093A: Processing configuration drop-ins resource: /opt/jboss/wildfly/...
[AUDIT] CWWF0016: Web application available (default_host): http://0/0bbf5fa...
b10:9000/
[...]
[AUDIT] CWWF0013: Application reviews-app started in 0.548 seconds.
[AUDIT] CWWF0012: The server installed the following features: [jaxrs-2.0, ...
[AUDIT] CWWF0013: The server removed the following features: [appClientSupp...
rt-1.0, appSecurity-2.0, appSecurity-3.0, batch-1.0, beanValidation-2.0, cdi-2.0, concurrent-1.0, ...
distributedMap-1.0, ejb-3.2, ejbHome-3.2, ejbLite-3.2, ejbPersistentTimer-3.2, ejbRemote-3.2, el-...
l-1.0, emfManagement-1.0, jaxrs-2.0, jaxrsClient-1.1, jaxrsMail-1.6, jaxrs-2.0, jaxrs-2.1, jax...
jaxrsClient-2.0, jaxrs-2.1, jaxrsClient-2.0, jaxrs-2.2, jaxrs-2.3, jaxrs-2.4, jaxrs-2.5, jax...
ontainer-2.2, jsf-2.3, jsonb-1.0, jsonp-1.1, jsp-2.0, swf-1.0, managedBeans-1.0, mdb-3.2, micro...
file-3.0, mpConfig-1.3, mpFaultTolerance-2.0, mpHealth-2.0, mpJwt-1.1, mpMetrics-2.0, mpOpenD...
t-1.1, mpOpenTracing-1.3, mpRestClient-1.3, optracing-1.3, servlet-4.0, ssl-1.0, wasJmsClient-2.0, ...
asJmsSecurity-1.0, wasJmsServer-1.0, webprofile-0.0, websocket-1.1].
[AUDIT] CWWF0011: The defaultServer server is ready to run a smarter planet.
The defaultServer server started after 165 seconds.
[...]
g20-productpage | DEBUG:urllib3:connectionpool:Starting new HTTP connection (): details:9080
[...]
g20-details | -> /details/0
[...]
g20-productpage | send: b'GET /details/0 HTTP/1.1\r\nHost: details:9080\r\nUser-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/97.0.4692.71 Safari/5...
[...]
g20-productpage | header: Content-Type: application/json
[...]
g20-productpage | header: Server: WSGI/1.0
[...]
g20-productpage | header: Date: Sat, 22 Jan 2022 18:45:43 GMT
[...]
g20-productpage | header: Content-Length: 178
[...]
g20-productpage | header: Connection: Keep-Alive
[...]
g20-productpage | DEBUG:urllib3:connectionpool:http://details:9080 "GET /details/0 HTTP/1.1" 200 ...
[...]
g20-productpage | DEBUG:urllib3:connectionpool:Starting new HTTP connection (): reviews:9080
[...]
g20-productpage | GET /ratings/0
[...]
g20-productpage | send: b'GET /reviews/0 HTTP/1.1\r\nHost: reviews:9080\r\nUser-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/97.0.4692.71 Safari/5...
[...]
g20-productpage | header: Content-Type: application/json
[...]
g20-productpage | header: Accept: */*\r\nConnection: keep-alive\r\nX-NX-B3-TraceId: 9c591cd429d334\r\nX-NX-B3-Sampled: 1\r\n\r\n\r\n'
[...]
g20-productpage | header: X-Powered-By: Servlet/3.1
[...]
g20-productpage | header: Content-Type: application/json
[...]
g20-productpage | header: Date: Sat, 22 Jan 2022 18:45:44 GMT
[...]
g20-productpage | header: Content-Language: en-US
[...]
g20-productpage | header: Content-Length: 375
[...]
g20-productpage | DEBUG:urllib3:connectionpool:http://reviews:9080 "GET /reviews/0 HTTP/1.1" 200 ...
[...]
g20-productpage | INFO:werkzeug:fffff:176.83.168.228 - - [22/Jan/2022 18:45:44] "GET /productpage...
HTTP/1.1" 200 -
[...]

```

Comando despliegue del contenedor:

```
sudo docker-compose up
```

RESOLUCIÓN A PREGUNTA DEL ENUNCIADO:

El servicio que hemos implantado de docker y docker-compose sería fácilmente escalable al usar esta tecnología a diferencia de las MVs virtuales pesadas. Aunque funciona correctamente de esta manera, no es super fiable debido a que el sistema al no estar implementado con kubernetes, servicio el cual, protege muy bien ante la desconexión de servidores u otros problemas que puedan surgir para mantener siempre funcionando el sistema ininterrumpidamente.