




Proyecto de Sistemas Operativos – Sesión 2: El Sindicato de Contenedores

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 Cursos	 <u>Sistemas Operativos</u>
 Estado	Sin empezar

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Repositorio:

https://github.com/Dylalva/Proyecto2_SO

Comandos utilizados:

Comando para levantar el **docker-compose**

```
docker-compose up -d
```

Este comando construye las imágenes del frontend, backend y descarga la imagen de MariaDB para la base de datos. La importancia de usar **Docker Compose** es que crea los 3 contenedores en un mismo entorno, como si fueran una sola aplicación, con esto se puede hacer que los contenedores estén en la misma red y se puedan comunicar.

Comandos para eliminar el **docker-compose**

```
docker-compose down --volumes
```

Evidencias

```
PS C:\Users\dylal\Documentos\Ciclo_I_2025\Sistemas Operativos\Proyecto2_S0\src> docker-compose up -d
time="2025-06-12T18:48:15-06:00" level=warning msg="C:\\Users\\dylal\\Documentos\\Ciclo_I_2025\\Sistemas Operativos\\Proy
ecto2_S0\\src\\docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid pot
ential confusion"
[+] Running 9/9
 ✓ database Pulled 14.4s
 ✓ d9d352c11bbd Pull complete 6.7s
 ✓ 87381ff545f9 Pull complete 11.6s
 ✓ 271c152ca4f4 Pull complete 0.5s
 ✓ 54629b454f33 Pull complete 0.5s
 ✓ 48f38a8fddb6 Pull complete 0.6s
 ✓ 25a7db65036f Pull complete 7.4s
 ✓ 724d2bd0d22b Pull complete 0.6s
 ✓ 1505691d6c89 Pull complete 0.6s
Compose can now delegate builds to bake for better performance.
To do so, set COMPOSE_BAKE=true.
[+] Building 39.8s (22/22) FINISHED docker:desktop-linux
=> [backend internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 339B 0.0s
=> [frontend internal] load metadata for docker.io/library/python:3.12-slim 1.2s
=> [backend auth] library/python:pull token for registry-1.docker.io 0.0s
=> [backend internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [backend internal] load build context 0.0s
=> => transferring context: 404B 0.0s
=> [frontend 1/6] FROM docker.io/library/python:3.12-slim@sha256:e55523f127124e5edc03ba201e3dbbc85172a2ec40d8651a 0.2s
```

Levantando contenedores con docker-compose

```
=> => unpacking to docker.io/library/src-frontend:latest 2.3s
=> [frontend] resolving provenance for metadata file 0.0s
[+] Running 6/6
 ✓ backend Built 0.0s
 ✓ frontend Built 0.0s
 ✓ Network src_project2net Created 0.1s
 ✓ Container project2_db Started 2.8s
 ✓ Container project2_backend Started 2.0s
 ✓ Container frontend Started 2.0s
```

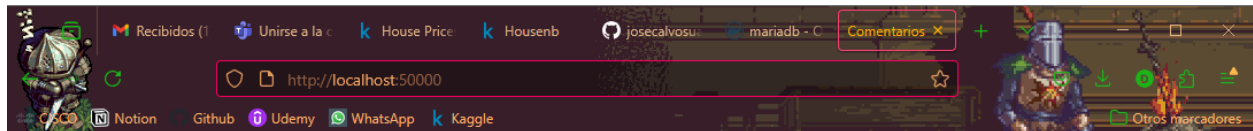
Contenedores corriendo después de le ejecutar `docker-compose up -d`

src	-	-	-	0.52%	3 minutes ago	
project2_db	9e60d6a24534	mariadb:latest	3306:3306	0.02%	3 minutes ago	
project2_backend	23bc1e55b19d	src-backend	5001:5001	0.29%	3 minutes ago	
frontend	302438708fc3	src-frontend	50000:5000	0.21%	3 minutes ago	

Contenedores levantados mediante `docker-compose`

```
DEBUG MODE: ON
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.18.0.4:5000
Press CTRL+C to quit
* Restarting with stat
172.18.0.1 - - [13/Jun/2025 00:54:37] "POST / HTTP/1.1" 200 -
172.18.0.1 - - [13/Jun/2025 00:54:41] "POST / HTTP/1.1" 200 -
172.18.0.1 - - [13/Jun/2025 00:54:45] "GET / HTTP/1.1" 200 -
```

Salidas del contenedor frontend



FrontEnd corriendo en el puerto 5000.



Enviar Comentario

Nombre:

Comentario:

Comentario enviado exitosamente.

Comentarios Previos

- Dylan: Hola, saludos cordiales
- Dylan: El mejor profe: El Tigre

Conexión con el FrontEnd→BackEnd→DataBase

```
PS C:\Users\dylal\Documentos\Ciclo_I_2025\Sistemas Operativos\Proyecto2_S0\src> docker-compose down --volumes
time="2025-06-12T19:11:07-06:00" level=warning msg="C:\\Users\\dylal\\Documentos\\Ciclo_I_2025\\Sistemas Operativos\\Proy
ecto2_S0\\src\\docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid pot
ential confusion"
[+] Running 4/4
 ✓ Container frontend      Removed      0.8s
 ✓ Container project2_backend Removed      0.7s
 ✓ Container project2_db   Removed      0.9s
 ✓ Network src_project2net Removed      0.7s
```

Eliminando la aplicación con sus `volumes`