Práctica 2025-26: Cloud Computing (AWS): Dashboard serverless programático para CSV (Web + 3 Lambdas)

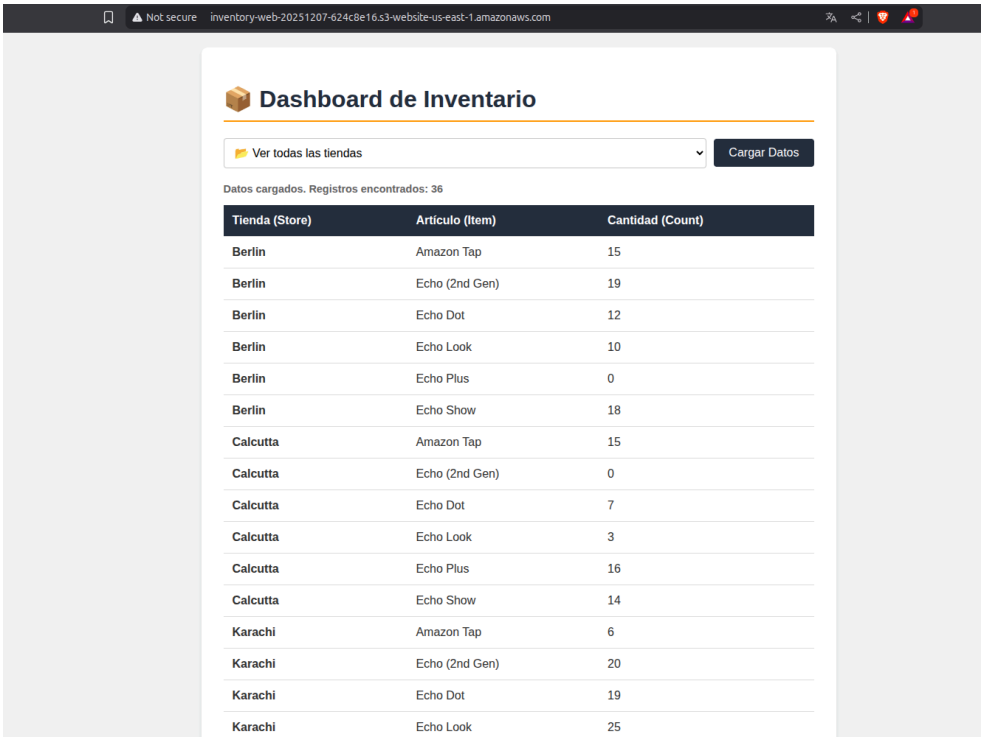
Alex Terreros

Capturas de pantalla del funcionamiento

`python deploy_script.py`

```
(rl) alex@alex-laptop:~/Documents/master/cloudComputing/practica-aws$ python deploy_script.py
=== INICIANDO NUEVO DESPLIEGUE (Sufijo: 20251207-624c8e16) ===
[S3] Bucket creado: inventory-uploads-20251207-624c8e16
[S3] Bucket creado: inventory-web-20251207-624c8e16
[DDB] Creando tabla: Inventory...

--- Desplegando Lambda A (Loader) ---
[Lambda] Función creada: LoadInventoryFunction

--- Desplegando Lambda B (API) ---
[Lambda] Función creada: GetInventoryApiFunction
[API GW] API creada: InventoryAPI (ID: 2w0jqtna2m)

--- Desplegando Lambda C (Notify) ---
[SNS] Topic: arn:aws:sns:us-east-1:058264077747:NoStock-20251207-624c8e16
[SNS] Suscripción enviada a alexdario.terreros@opendeusto.es
[Lambda] Función creada: NotifyLowStockFunction
[S3] Trigger configurado: inventory-uploads-20251207-624c8e16 -> LoadInventoryFunction
[Lambda] Stream conectado a NotifyLowStockFunction

--- Desplegando Frontend ---

--- Ingestando Datos desde carpeta 'data' ---

[Data] Buscando archivos CSV en './data' para subir a inventory-uploads-20251207-624c8e16...
   -> Subiendo: inventory-berlin.csv ...
   -> Subiendo: inventory-karachi.csv ...
   -> Subiendo: inventory-calcutta.csv ...
   -> Subiendo: inventory-pusan.csv ...
   -> Subiendo: inventory-springfield.csv ...
   -> Subiendo: inventory-shanghai.csv ...
[Data] Subida completada. Las Lambdas deberían activarse en breve.

=== DESPLIEGUE FINALIZADO ===
Bucket CSV      : s3://inventory-uploads-20251207-624c8e16
API Endpoint    : https://2w0jqtna2m.execute-api.us-east-1.amazonaws.com
Web Dashboard   : http://inventory-web-20251207-624c8e16.s3-website-us-east-1.amazonaws.com/
```

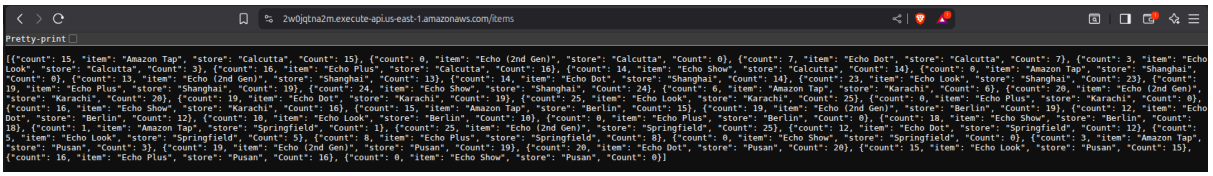
Funcionamiento web



Tienda (Store)	Artículo (Item)	Cantidad (Count)
Berlin	Amazon Tap	15
Berlin	Echo (2nd Gen)	19
Berlin	Echo Dot	12
Berlin	Echo Look	10
Berlin	Echo Plus	0
Berlin	Echo Show	18
Calcutta	Amazon Tap	15
Calcutta	Echo (2nd Gen)	0
Calcutta	Echo Dot	7
Calcutta	Echo Look	3
Calcutta	Echo Plus	16
Calcutta	Echo Show	14
Karachi	Amazon Tap	6
Karachi	Echo (2nd Gen)	20
Karachi	Echo Dot	19
Karachi	Echo Look	25

Respuesta de la API

`/items`



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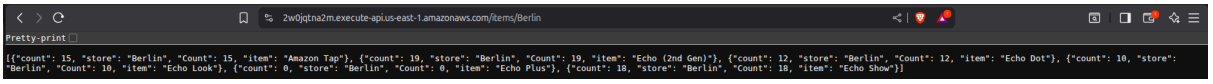
/items/Belin



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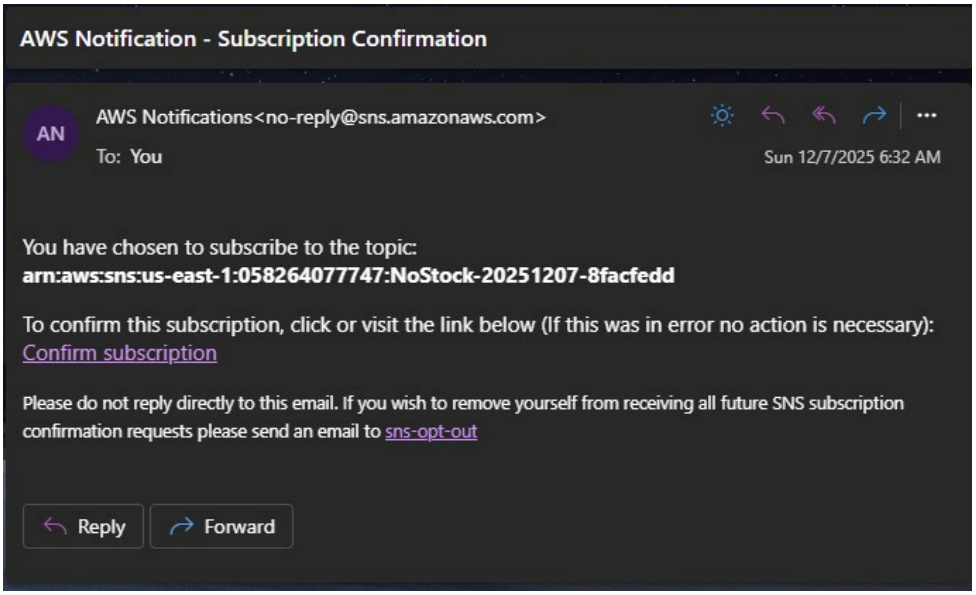
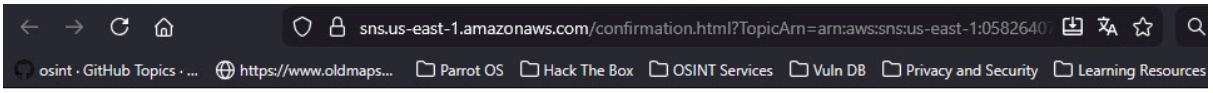
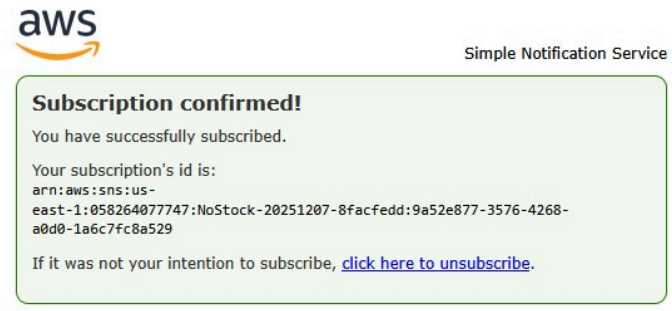
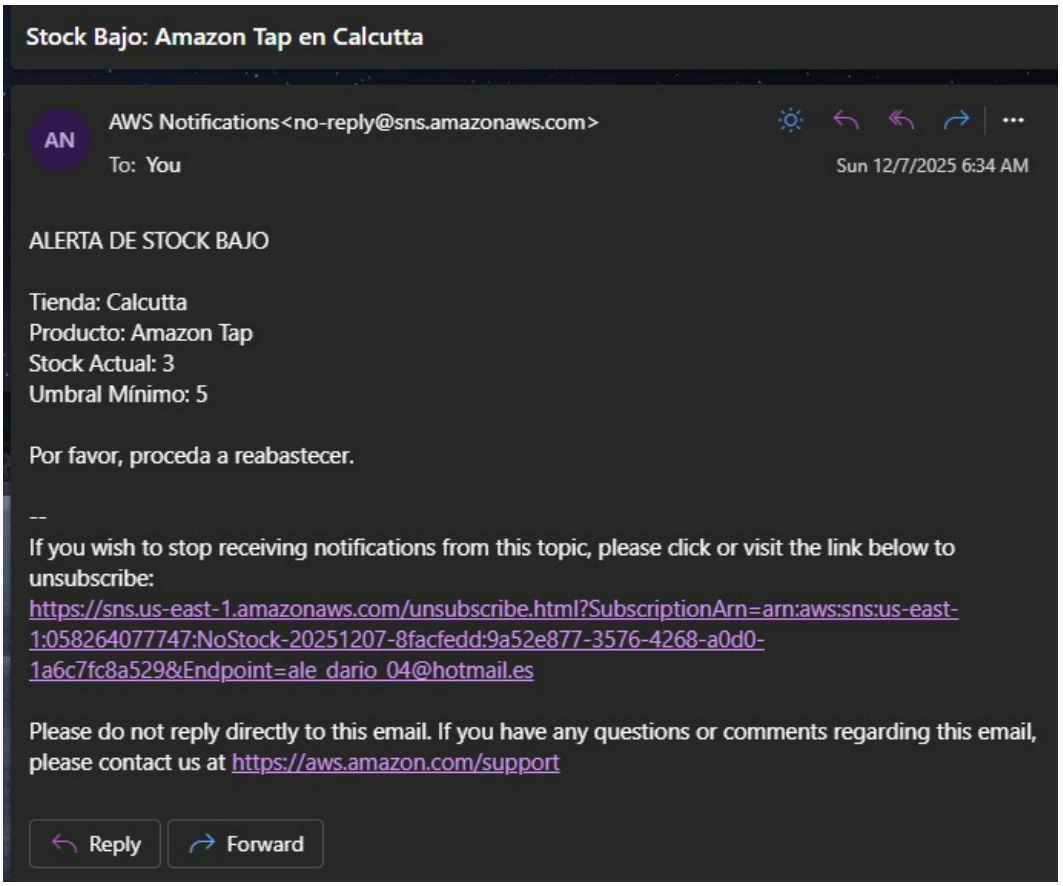
Email de SNS







Email de bajo stock



Teardown

`python teardown.py`

```
(rl) alex@alex-laptop:~/Documents/master/cloudComputing/practica-aws$ python teardown.py
=== INICIANDO TEARDOWN (Borrado de recursos) ===
[Config] Base de datos local eliminada.
[API GW] API eliminada (ID: 2w0jqtna2m)
[Lambda] Función eliminada: LoadInventoryFunction
[Lambda] Función eliminada: GetInventoryApiFunction
[Lambda] Trigger eliminado para NotifyLowStockFunction (UUID: d0d96d2d-e796-429a-94cb-8c0c7bb34d20)
[Lambda] Función eliminada: NotifyLowStockFunction
[DDB] Tabla eliminada: Inventory
[SNS] Topic eliminado: arn:aws:sns:us-east-1:058264077747:NoStock-20251207-624c8e16
[S3] Vaciando bucket: inventory-uploads-20251207-624c8e16...
[S3] Bucket eliminado: inventory-uploads-20251207-624c8e16
[S3] Vaciando bucket: inventory-web-20251207-624c8e16...
[S3] Bucket eliminado: inventory-web-20251207-624c8e16

=== TEARDOWN COMPLETO ===
```

Repositorio en github con el código:
https://github.com/militem/practica_aws.git