

Reto 2 – Evidencias de Ejecución (Arquitectura Hexagonal)

API REST (Java 11 + Spring Boot 2.7)

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1. Checklist de Evaluación (5 × 20 pts)

- Estructura multi-módulo y referencias respetando Arquitectura Hexagonal.
- Dominio implementado: Modelo y Puertos (In/Out).
- Aplicación implementada: Servicios/Use Cases (sin dependencia de frameworks).
- Adapters implementados: Inbound REST y Outbound (InMemory / JPA opcional).
- Pruebas GET/POST y evidencias de ejecución (capturas).

2. Entorno de Ejecución

SO	Windows/Linux/macOS
Java	17 (Temurin/Oracle/OpenJDK)
Spring Boot	3.3.x
Maven	3.9.x
Base de datos	InMemory (H2 opcional)
Puerto HTTP	8080

3. Cómo Ejecutar

Desde la carpeta raíz `hexagonal-parent/`:

- `mvn -q clean package`
- `cd boot`
- `mvn -q spring-boot:run`

La API quedará disponible en `http://localhost:8080`

4. Endpoints Probados

1. 4.1 POST /api/products

Request (JSON):

```
{"name":"Monitor 24","price":2799.90}
```

cURL:

```
curl -X POST http://localhost:8080/api/products -H "Content-Type: application/json" -d '{"name":"Monitor 24","price":2799.90}'
```

2. 4.2 GET /api/products/{id}

cURL:

```
curl http://localhost:8080/api/products/<UUID>
```

3. 4.3 GET /api/products

cURL:

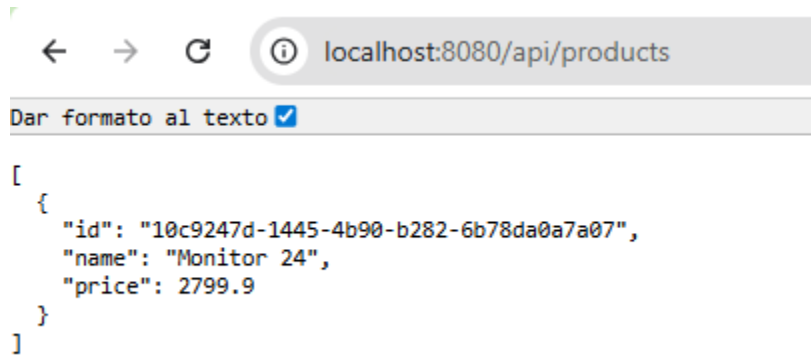
curl http://localhost:8080/api/products

5. Evidencias (Pantallas de ejecución y respuesta)

POST /api/products – Request Con Response 200

Name	×	Headers	Preview	Response	Initiator	Timing	Cookies
products		General					
js.js		Response Headers	<input type="checkbox"/> Raw				
dom.js							
js.js							
dom.js							
		Connection		keep-alive			
		Content-Type		application/json			
		Date		Mon, 22 Sep 2025 00:22:41 GMT			
		Keep-Alive		timeout=60			
		Transfer-Encoding		chunked			
		Request Headers	<input type="checkbox"/> Raw				
		Accept		text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7			
		Accept-Encoding		gzip, deflate, br, zstd			
		Accept-Language		es-ES;es;q=0.9,en;q=0.8			
		Connection		keep-alive			
		Cookie		_ga=GA1.1.562075323.1748240355			
		Host		localhost:8080			
		Sec-Ch-Ua		"Chromium";v="140", "Not=A?Brand";v="24", "Google Chrome";v="140"			
		Sec-Ch-Ua-Mobile		?0			
		Sec-Ch-Ua-Platform		"Windows"			
		Sec-Fetch-Dest		document			
		Sec-Fetch-Mode		navigate			
		Sec-Fetch-Site		none			
		Sec-Fetch-User		?1			
		Upgrade-Insecure-Requests		1			
		User-Agent		Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/140.0.0.0 Safari/537.36			
5 requests 7.0 kB transferred							

POST /api/products – Response 200



GET /api/products - Response 200

The screenshot shows a web browser window with a REST client interface. The address bar shows the URL `localhost:8080/api/products/10c9247d-1445-4b90-b282-6b78da0a7a07`. The interface includes tabs for Elements, Console, Sources, Network, Performance, Memory, Application, Privacy and security, Lighthouse, Recorder, and Redux. The Network tab is active, showing a list of requests. The selected request is a GET request to `http://localhost:8080/api/products/10c9247d-1445-4b90-b282-6b78da0a7a07` with a status of 200 OK. The response is a JSON object:

```
{
  "id": "10c9247d-1445-4b90-b282-6b78da0a7a07",
  "name": "Monitor 4",
  "price": 2799.9
}
```

Consola de arranque (Spring Boot)

```
PS C:\Users\jorge\Documents\Diplomado en Modernizaci3n de la Arquitectura de Software Cloud\reto2-hexagonal-java17-springboot\hexagonal-parent> c;; cd 'c:\Users\jorge\Documents\Diplomado en Modernizaci3n de la Arquitectura de Software Cloud\reto2-hexagonal-java17-springboot\hexagonal-parent\boot'; & 'C:\Users\jorge\jappa\jdk\ope
njdk@1.17.0\bin\java.exe' '@C:\Users\jorge\AppData\Local\Temp\cp_3djkmmnmtdqu3godpz9p3gx_argfile' 'com.example.boot.HexagonalApplication'

  ____  _
 / ___|| | | |
| |___| |_| |
 \___|__|__|_|
:: Spring Boot :: (v2.7.18)

2025-09-21 19:16:48.021 INFO 340880 --- [main] com.example.boot.HexagonalApplication : Starting HexagonalApplication using Java 17 on Usuario with PID 3
4080 (C:\Users\jorge\Documents\Diplomado en Modernizaci3n de la Arquitectura de Software Cloud\reto2-hexagonal-java17-springboot\hexagonal-parent\boot\target\classes
started by jorge in C:\Users\jorge\Documents\Diplomado en Modernizaci3n de la Arquitectura de Software Cloud\reto2-hexagonal-java17-springboot\hexagonal-parent\boot)
2025-09-21 19:16:48.027 INFO 340880 --- [main] com.example.boot.HexagonalApplication : No active profile set, falling back to 1 default profile: "default
t"
2025-09-21 19:16:49.103 INFO 340880 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)
2025-09-21 19:16:49.117 INFO 340880 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2025-09-21 19:16:49.117 INFO 340880 --- [main] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.83]
2025-09-21 19:16:49.208 INFO 340880 --- [main] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2025-09-21 19:16:49.209 INFO 340880 --- [main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 1103 ms
2025-09-21 19:16:49.721 INFO 340880 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''
2025-09-21 19:16:49.734 INFO 340880 --- [main] com.example.boot.HexagonalApplication : Started HexagonalApplication in 2.171 seconds (JVM running for 2.
661)
2025-09-21 19:16:55.387 INFO 340880 --- [nio-8080-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring DispatcherServlet 'dispatcherServlet'
2025-09-21 19:16:55.387 INFO 340880 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispatcherServlet'
2025-09-21 19:16:55.388 INFO 340880 --- [nio-8080-exec-1] o.s.web.servlet.DispatcherServlet : Completed initialization in 0 ms
```