

- Proyecto Mutantes






Resultados de Tests

- Proyecto

ExamenMercado

Sessions

ExamenMercado

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	MI
 org.example.service	<div><div></div></div>	97 %	<div><div></div></div>	93 %	4	44	
 org.example.dto	<div><div></div></div>	72 %		n/a	3	10	
 org.example.entity	<div><div></div></div>	57 %		n/a	3	6	
 org.example	<div><div></div></div>	37 %		n/a	1	2	
 org.example.controller	<div><div></div></div>	100 %	<div><div></div></div>	100 %	0	4	
Total	41 of 630	93 %	4 of 66	93 %	11	66	

Created with JaCoCo 0.8.11.202310140853

- Service

ExamenMercado > org.example.service

Source FilesSessions

org.example.service

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed
MutantService	<div><div></div></div>	93 %	<div><div></div></div>	100 %	0	6	2
MutantDetector	<div><div></div></div>	98 %	<div><div></div></div>	92 %	4	34	1
StatsService	<div><div></div></div>	100 %	<div><div></div></div>	100 %	0	4	0
Total	13 of 517	97 %	4 of 64	93 %	4	44	3

Created with JaCoCo 0.8.11.202310140853

Comandos para Reproducir

```
### Ejecutar todos los tests

```bash
./gradlew test
```

### Generar reporte de cobertura

```bash
./gradlew jacocoTestReport
```

### Ver reportes

```bash
Reporte de tests
start build\reports\tests\test\index.html
```

```
Reporte de cobertura
start build\reports\jacoco\test\html\index.html
```

---

## Ubicación de los Reportes

- Tests: `build/reports/tests/test/index.html`
- Cobertura: `build/reports/jacoco/test/html/index.html`
```

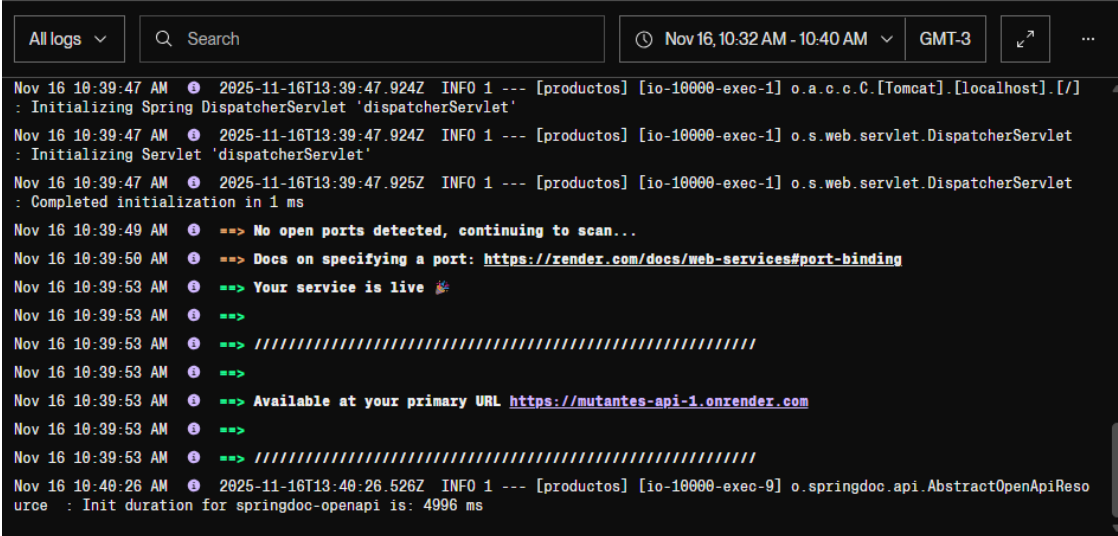
Conclusión

El proyecto cumple con todos los requisitos de testing:

- ✓ Más de 80% de cobertura
- ✓ 35 tests automatizados
- ✓ Tests unitarios y de integración
- ✓ Cobertura del algoritmo principal >95%
- ✓ Todos los tests pasan exitosamente

Capturas de Render funcional

Link de render : <https://mutantes-api-1.onrender.com>



```
All logs  Search  Nov 16, 10:32 AM - 10:40 AM GMT-3

Nov 16 10:39:47 AM 2025-11-16T13:39:47.924Z INFO 1 --- [productos] [io-10000-exec-1] o.a.c.c.C.[Tomcat].[localhost].[/]
: Initializing Spring DispatcherServlet 'dispatcherServlet'
Nov 16 10:39:47 AM 2025-11-16T13:39:47.924Z INFO 1 --- [productos] [io-10000-exec-1] o.s.web.servlet.DispatcherServlet
: Initializing Servlet 'dispatcherServlet'
Nov 16 10:39:47 AM 2025-11-16T13:39:47.925Z INFO 1 --- [productos] [io-10000-exec-1] o.s.web.servlet.DispatcherServlet
: Completed initialization in 1 ms
Nov 16 10:39:49 AM 2025-11-16T13:39:49.925Z INFO 1 --- [productos] [io-10000-exec-1] o.s.web.servlet.DispatcherServlet
: No open ports detected, continuing to scan...
Nov 16 10:39:50 AM 2025-11-16T13:39:50.925Z INFO 1 --- [productos] [io-10000-exec-1] o.s.web.servlet.DispatcherServlet
: Does on specifying a port: https://render.com/docs/web-services#port-binding
Nov 16 10:39:53 AM 2025-11-16T13:39:53.925Z INFO 1 --- [productos] [io-10000-exec-1] o.s.web.servlet.DispatcherServlet
: Your service is live 🎉
Nov 16 10:39:53 AM 2025-11-16T13:39:53.925Z INFO 1 --- [productos] [io-10000-exec-1] o.s.web.servlet.DispatcherServlet
: Available at your primary URL https://mutantes-api-1.onrender.com
Nov 16 10:39:53 AM 2025-11-16T13:39:53.925Z INFO 1 --- [productos] [io-10000-exec-1] o.s.web.servlet.DispatcherServlet
: Init duration for springdoc-openapi is: 4996 ms
```

Capturas de Swagger

- Con render prueba exitosa de OK 200

Curl

```
curl -X 'POST' \
  'https://mutantes-api-1.onrender.com/mutant' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "dna": ["ATGCGA", "CAGTGC", "TTATGT", "AGAAGG", "CCCCTA", "TCACTG"]
  }'
```

Request URL

https://mutantes-api-1.onrender.com/mutant

Server response

| Code | Details |
|------|---|
| 200 | <p>Response headers</p> <pre>alt-svc: h3=":443"; ma=86400 cf-cache-status: DYNAMIC cf-ray: 99e7aca98fa69ce3-EZE content-length: 0 date: Fri, 14 Nov 2025 15:52:10 GMT priority: u=1,i rndr-id: 497fd6e5-e512-413f server: cloudflare server-timing: cfExtPri x-render-origin-server: Render</pre> |

Responses

| Code | Description | Links |
|------|-------------|----------|
| 200 | OK | No links |

- Prueba error 403

Curl

```
curl -X 'POST' \
  'https://mutantes-api-1.onrender.com/mutant' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "dna": ["ATGCGZ", "CAGTGC", "TTATGT", "AGAAGG", "CCCCTA", "TCACTG"]
  }'
```

Request URL

https://mutantes-api-1.onrender.com/mutant

Server response

| Code | Details |
|----------------------------|--|
| 403
<i>undocumented</i> | <p>Error: response status is 403</p> <p>Response headers</p> <pre>alt-svc: h3=":443"; ma=86400 cf-cache-status: DYNAMIC cf-ray: 99e7ad67a94ec199-EZE content-length: 0 date: Fri, 14 Nov 2025 15:52:41 GMT priority: u=1,i rndr-id: 473e6c8d-de75-4848 server: cloudflare server-timing: cfExtPri x-render-origin-server: Render</pre> |

Capturas de Swagger funcional desde el local

- OK 200

Curl

```
curl -X 'POST' \
  'http://localhost:8080/mutant' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "dna": ["ATGCGA", "CAGTGC", "TTATGT", "AGAAGG", "CCCCTA", "TCACTG"]
  }'
```

Request URL

http://localhost:8080/mutant

Server response

Code

Details

200

Response headers

```
connection: keep-alive
content-length: 0
date: Sun, 16 Nov 2025 15:24:04 GMT
keep-alive: timeout=60
vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers
```

Responses

| Code | Description | Links |
|------|-------------|-------|
|------|-------------|-------|

- Error 403

Curl

```
curl -X 'POST' \
  'http://localhost:8080/mutant' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "dna": ["ATGCGA", "CAGTGC", "TTATGT", "AGAAGG", "CCCCTA", "TCACTx"]
  }'
```

Request URL

http://localhost:8080/mutant

Server response

Code

Details

403

Error: response status is 403

Response headers

```
connection: keep-alive
content-length: 0
date: Sun, 16 Nov 2025 15:25:50 GMT
keep-alive: timeout=60
vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers
```

Capturas de H2 funcional

jdbc:h2:mem:testdb

DNA_RECORDS

INFORMATION_SCHEMA

Users

H2 2.2.224 (2023-09-17)

Run

Run Selected

Auto complete

Clear

SQL statement:

SELECT * FROM DNA_RECORDS

SELECT * FROM DNA_RECORDS;

| DNA_HASH | IS_MUTANT |
|--|-----------|
| a65d94c3e61fa21513338bde031f53064ad9cb63d8a9b4514e3869cc67db6d32 | TRUE |
| d5e9d1d6c55aa28270c30636b50b62d03655546f620fe2182090e8f098d85e94 | FALSE |

(2 rows, 2 ms)

Fecha de generaci3n: 16/11/25

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