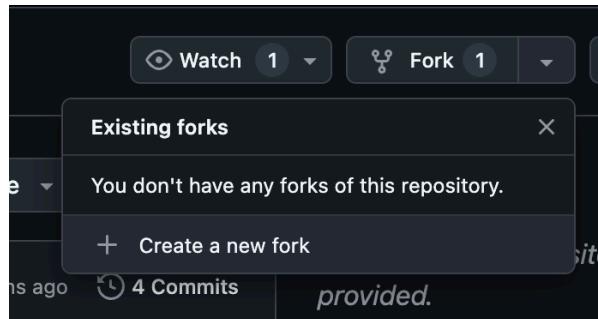


Trabajo final integración continua

2) Repositorio moviecards-service y despliegue en Azure

Primero he hecho una copia del repositorio proporcionado en el enlace <https://github.com/josehilara/moviecards-service>. Para ello, desde git en Fork he seleccionado “+ Create a new fork”.

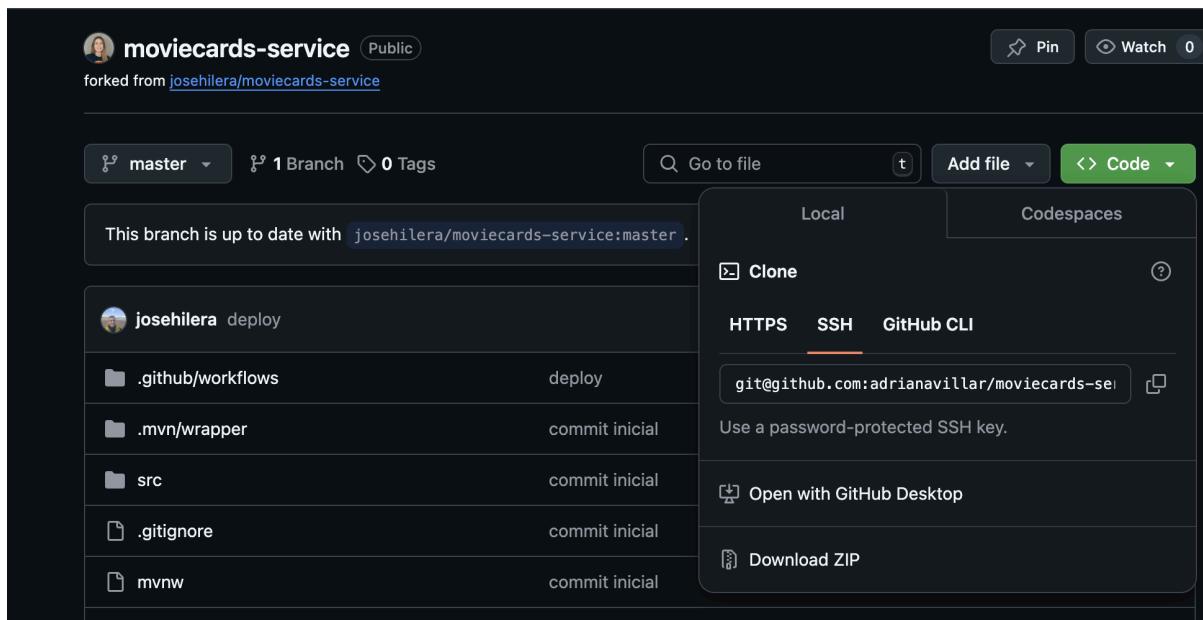


Le he puesto el nombre “moviecards-service” y le he dado a Create fork.

A screenshot of the 'Create a new fork' form on GitHub. It shows the following fields:

- Owner ***: adrianavillar
- Repository name ***: moviecards-service
- moviecards-service is available.
- Description (optional)**: (empty text area)
- Copy the master branch only
- Contribute back to josehilara/moviecards-service by adding your own branch. [Learn more.](#)
- (i) You are creating a fork in your personal account.
- Create fork** button

Para clonar el repositorio en local he copiado la clave SSH y dentro de la carpeta donde quería clonarlo, desde la terminal de comandos he puesto lo siguiente:
git clone git@github.com:adrianavillar/moviecards-service.git



```
~/Desktop/integracion-continua (2.042s)
git clone git@github.com:adrianavillar/moviecards-service.git
Cloning into 'moviecards-service'...
remote: Enumerating objects: 72, done.
remote: Counting objects: 100% (72/72), done.
remote: Compressing objects: 100% (43/43), done.
remote: Total 72 (delta 15), reused 66 (delta 13), pack-reused 0 (from 0)
Receiving objects: 100% (72/72), 76.44 KiB | 850.00 KiB/s, done.
Resolving deltas: 100% (15/15), done.
```

Después he seguido los pasos de la guía para hacer el despliegue en Azure (3.4 Trabajo deploy / 3.4.1 Despliegue continuo).

Una vez desplegado y accesible desde el enlace

<https://moviecards-service-villar.azurewebsites.net/>, he probado los endpoints para comprobar que funcionaban correctamente.

The screenshot shows the Postman interface with a successful API call. The URL is `https://moviecards-service-villar.azurewebsites.net/actors`. The response status is `200 OK` with a response time of `209 ms` and a size of `218 B`. The response body is a JSON array containing one actor object:

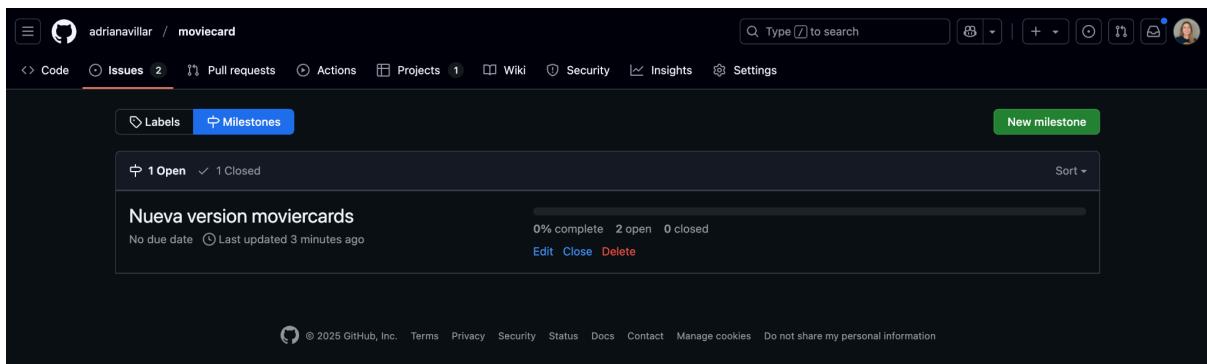
```
1 [  
2 {  
3   "id": 1,  
4   "name": "Lady Gaga",  
5   "birthDate": "1984-03-01T00:00:00.000+00:00",  
6   "country": "EEUU",  
7   "movies": []  
8 }  
9 ]
```

Below this, another request is shown for `https://moviecards-service-villar.azurewebsites.net/actors/1`. The response status is `200 OK` with a response time of `448 ms` and a size of `216 B`. The response body is a single actor object:

```
1 {  
2   "id": 1,  
3   "name": "Lady Gaga",  
4   "birthDate": "1984-03-01T00:00:00.000+00:00",  
5   "country": "EEUU",  
6   "movies": []  
7 }
```

3) Nueva versión de moviecards

He creado una milestone nueva:



Después, he creado dos issues, me las he asignado a mi misma, al proyecto moviecards y a la milestone que acabo de crear “Nueva version moviecards”.

A screenshot of the GitHub Projects board for the 'adrianavillar/moviecards' project. The board has four columns: 'No Status' (2 items), 'Todo' (0 items), 'In Progress' (0 items), and 'Done' (2 items). The 'No Status' column contains two items: 'moviecard #9' and 'moviecard #10'. The 'Done' column contains two items: 'moviecard #2' and 'moviecard #3'. Each item has a description and a user icon.

He pasado las dos issues a Todo, y una de ellas a In Progress:

A screenshot of the GitHub Projects board for the 'adrianavillar/moviecards' project. The board has four columns: 'Todo' (1 item), 'In Progress' (1 item), 'Done' (2 items), and an empty column. The 'Todo' column contains one item: 'moviecard #10'. The 'In Progress' column contains one item: 'moviecard #9'. The 'Done' column contains two items: 'moviecard #2' and 'moviecard #3'. Each item has a description and a user icon.

Después de cambiar el código como indica la práctica, he hecho commit pero el proceso de despliegue ha fallado porque no ha superado la cobertura que tenía especificada:

```

qa
failed 1 minute ago in 24s
16s
Review code quality with Sonarqube
116 [INFO] SCM PUBLISHER: No SCM system was detected. You can use the "sonar.scm.provider" property to explicitly specify it.
117 [INFO] CPD Executor 7 files had no CPD blocks
118 [INFO] CPD Executor Calculating CPD for 10 files
119 [INFO] CPD Executor CPD calculation finished (done) | time=6ms
120 [INFO] Analysis report generated in 33ms, dir size=246.9 kB
121 [INFO] Analysis report compressed in 22ms, zip size=87.8 kB
122 [INFO] Analysis report uploaded in 21ms
123 [INFO] Check Quality Gate status
124 [INFO] Waiting for the analysis report to be processed (max 300s)
125 [INFO] -----
126 [INFO] BUILD FAILURE
127 [INFO] -----
128 [INFO] Total time: 14.613 s
129 [INFO] Finished at: 2025-02-01T23:01:22Z
130 [INFO] -----
131 [ERROR] Failed to execute goal org.sonarsource.scanner.maven:sonar-maven-plugin:3.10.0.2594:sonar (default-cli) on project moviecards:
        QUALITY GATE STATUS: FAILED - View details on http://localhost:9000/dashboard?id=com.lauracercas%3Amoviecards -> [Help 1]
132 [ERROR]
133 [ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
134 [ERROR] Re-run Maven using the -X switch to enable full debug logging.
135 [ERROR]
136 [ERROR] For more information about the errors and possible solutions, please read the following articles:
137 [ERROR] [Help 1] http://wiki.apache.org/confluence/display/MAVEN/MojoExecutionException
138 Error: Process completed with exit code 1.

```

Por ello, he ido a SonarQube y he bajado el nivel de cobertura a 0% para que pueda seguir con el despliegue:

Update Condition

Quality Gate fails when

Coverage on New Code

Metric	Operator	Value
Coverage	is less than	0

Conditions on New Code

Metric	Operator	Value
Coverage	is less than	0.0%
Duplicated Lines (%)	is greater than	3.0%
Maintainability Rating	is worse than	A (Technical debt ratio is less than 5.0%)
Reliability Rating	is worse than	A (No bugs)
Security Hotspots Reviewed	is less than	100%
Security Rating	is worse than	A (No vulnerabilities)

Conditions on Overall Code

He aprobado manualmente el workflow:

Manual approval required for workflow run 13093206216 #13

[Edit](#) [New issue](#)

[Open](#)

adrianavillar opened now

Workflow is pending manual review.
URL: <https://api.github.com/adrianavillar/moviecard/actions/runs/13093206216>

Required approvers: [adrianavillar]

Respond "approved", "approve", "lgtm", "yes" to continue workflow or "denied", "deny", "no" to cancel.

[Create sub-issue](#) [...](#)

adrianavillar self-assigned this now

Add a comment

Write Preview

yes

Assignees: adrianavillar

Labels: No labels

Projects: No projects

Milestone: No milestone

Relationships: None yet

Development: Create a branch for this issue or link a pull request.

Notifications: Customize

Y ha finalizado el despliegue.

← My first CI/CD pipeline

✓ Merge remote-tracking branch 'origin/main' #26

[Re-run all jobs](#) [Latest #3](#) ...

[Summary](#)

Jobs: build, test, qa, deploy

Run details: Usage, Workflow file

main.yaml

on: push

```

graph LR
    build --> test
    test --> qa
    qa --> deploy
    
```

Status: Success, Total duration: 2m 32s, Artifacts: 1

Para comprobarlo he añadido desde Postman un actor más y desde la aplicación he comprobado que salgan en el listado de actores:

GET https://moviecards-service-villar.azurewebsites.net/actors

Send

Params Authorization Headers (6) Body Scripts Tests Settings Cookies

Body: [Pretty](#) [Raw](#) [Preview](#) [Visualize](#) [JSON](#) [...](#)

200 OK 101 ms 320 B [Save Response](#) ...

```

1  [
2   {
3     "id": 1,
4     "name": "Lady Gaga",
5     "birthDate": "1984-03-01T00:00:00.000+00:00",
6     "country": "EEUU",
7     "movies": []
8   },
9   {
10    "id": 2,
11    "name": "Katy Perry",
12    "birthDate": "1998-07-05T00:00:00.000+00:00",
13    "country": "EEUU",
14    "movies": []
15  }
16 ]

```

Listado Actores

Identificador	Nombre	Fecha Nacimiento	País	Editar
1	Lady Gaga	01-03-1984	EEUU	<button>Editar</button>
2	Katy Perry	05-07-1998	EEUU	<button>Editar</button>

Volver a la Página de Inicio

Por último, he pasado las dos issues a finalizado y el milestone también:

4) Añadir un nuevo atributo deadDate en la clase Actor

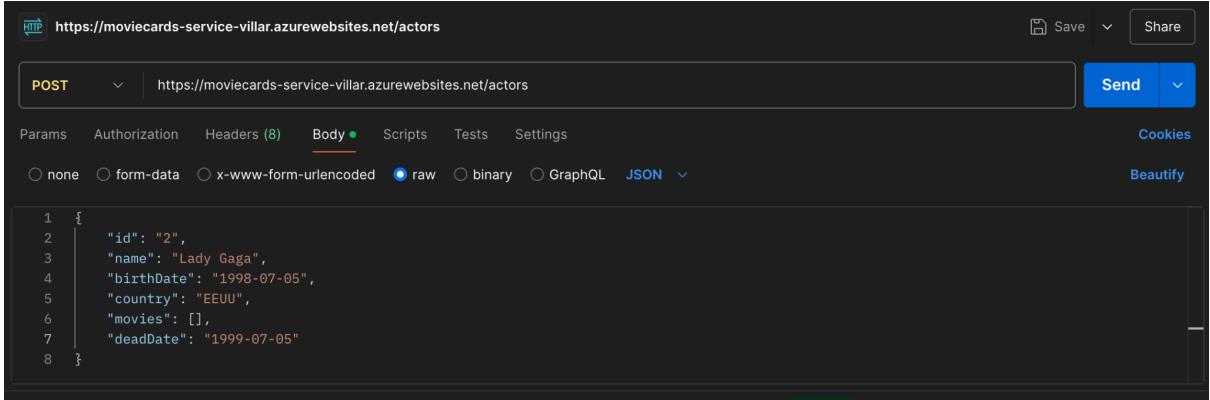
Dentro de la clase Actor.java he añadido el campo deadDate junto con sus respectivos getters y setters y he hecho commit.

```
@DateTimeFormat(pattern = "yyyy-MM-dd") 2 usages
private Date deadDate;
```

```
public Date getDeadDate() { return deadDate; }

public void setDeadDate(Date deadDate) { this.deadDate = deadDate; }
```

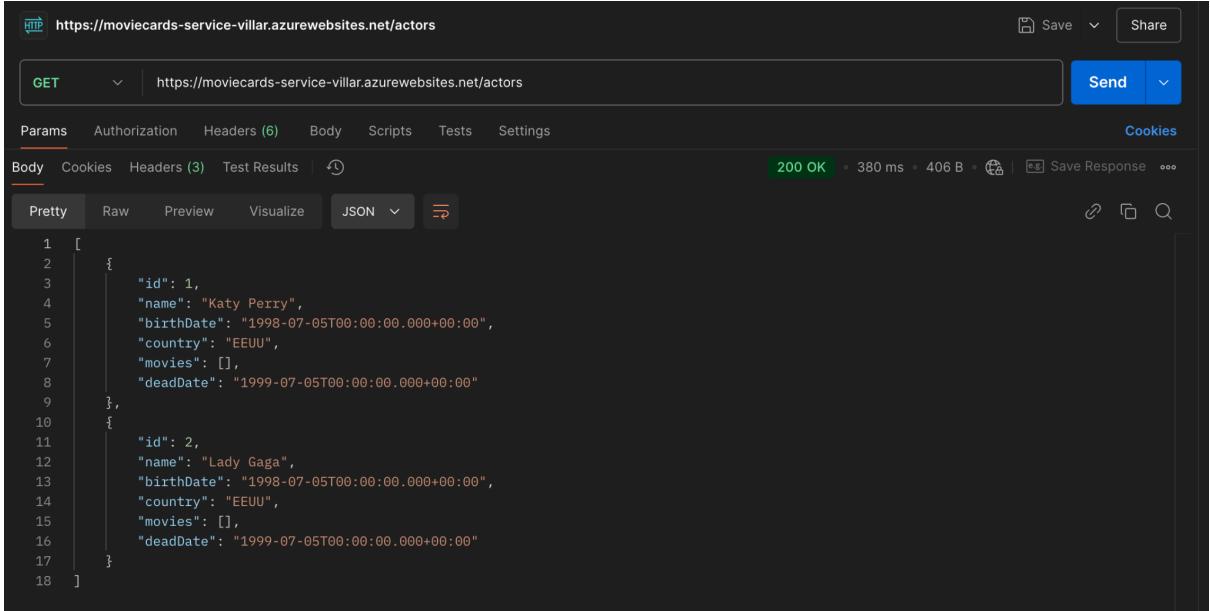
Desde postman he comprobado que funcione correctamente y guardase la fecha de fallecimiento:



```

1 {
2   "id": "2",
3   "name": "Lady Gaga",
4   "birthDate": "1998-07-05",
5   "country": "EEUU",
6   "movies": [],
7   "deadDate": "1999-07-05"
8 }

```

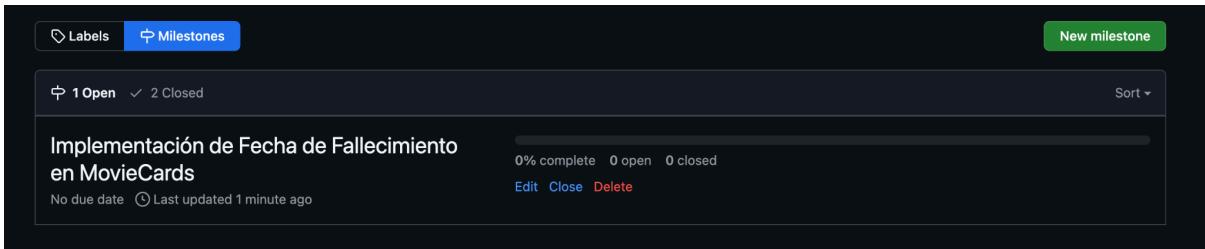
```

1 [
2   {
3     "id": 1,
4     "name": "Katy Perry",
5     "birthDate": "1998-07-05T00:00:00.000+00:00",
6     "country": "EEUU",
7     "movies": [],
8     "deadDate": "1999-07-05T00:00:00.000+00:00"
9   },
10  {
11    "id": 2,
12    "name": "Lady Gaga",
13    "birthDate": "1998-07-05T00:00:00.000+00:00",
14    "country": "EEUU",
15    "movies": [],
16    "deadDate": "1999-07-05T00:00:00.000+00:00"
17  }
18 ]

```

5) Implementación de DeadDate en MovieCards

He creado el milestone y las issues. Además, he pasado las issues a Todo.



The screenshot shows the GitHub Issues page for the repository "adrianavillar / moviecard". The search bar at the top contains the query "is:issue state:open". Below the search bar, there are filters for "Labels" and "Milestones". The main list displays six open issues, each with a green circle icon indicating they are open. The issues are:

- Reducir problemas críticos en SonarQube a menos de 5
- Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- Modificar tests unitarios para manejar fecha de fallecimiento
- Modificar modelo y lógica para manejar fecha de fallecimiento
- Agregar trabajo "stage" al workflow para pre-producción

Each issue includes a timestamp and a link to the issue details.

The screenshot shows a GitHub Project board titled "moviecards". The board has three columns: "Todo" (6 items), "In Progress" (0 items), and "Done" (4 items). The "Todo" column contains the following items:

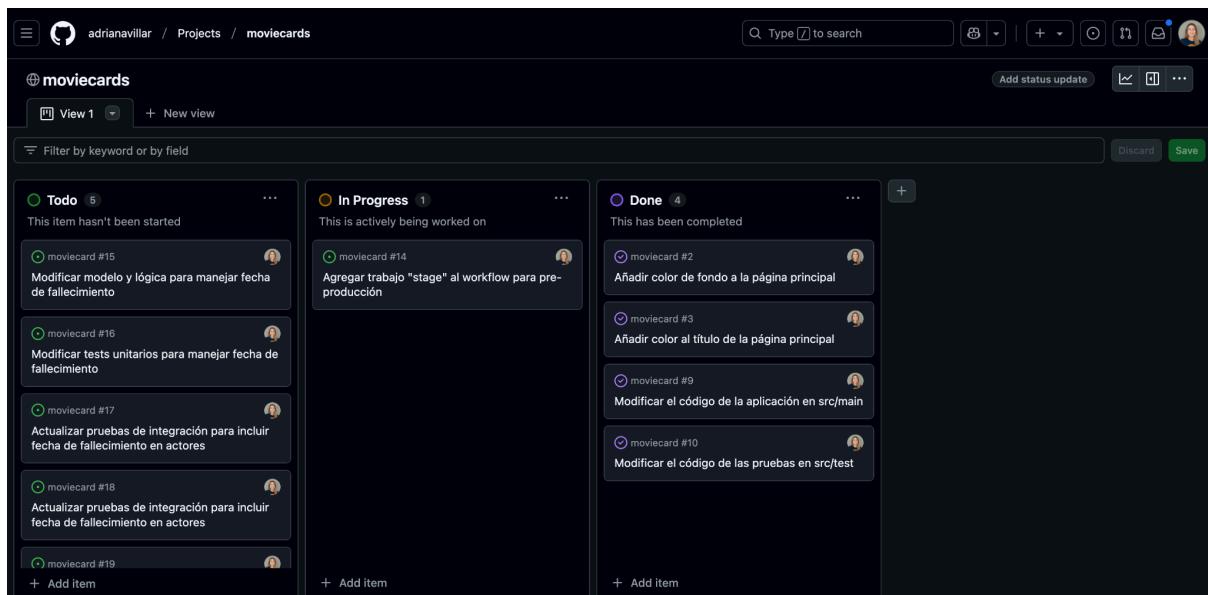
- Modificar tests unitarios para manejar fecha de fallecimiento
- Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- Reducir problemas críticos en SonarQube a menos de 5

The "In Progress" column is currently empty. The "Done" column contains the following items:

- Añadir color de fondo a la página principal
- Añadir color al título de la página principal
- Modificar el código de la aplicación en src/main
- Modificar el código de las pruebas en src/test

5.1)

He pasado la issue a In Progress:



He vuelto a crear una nueva aplicación web en azure, esta vez llamada moviecards-pre-villar.

En cuanto al código he añadido en el main.yaml una nueva fase llamada stage antes de deploy:

```

79   stage:
80     runs-on: ubuntu-latest
81     needs: qa
82     if: github.ref=='refs/heads/main'
83     environment:
84       name: 'Staging'
85       url: ${{ steps.deploy-to-webapp.outputs.webapp-url }}
86
87     steps:
88       - name: Download artifact from build job
89         uses: actions/download-artifact@v4
90         with:
91           name: moviecards-pre-java
92
93       - name: Deploy to Azure Web App (Staging)
94         id: deploy-to-webapp
95         uses: azure/webapps-deploy@v3
96         with:
97           app-name: 'moviecards-pre-villar'
98           slot-name: 'Staging'
99           package: '*.jar'
100          publish-profile: ${{ secrets.AZUREAPPSPROFILE_12F11B88D8CE4CA7B28172DF9308BA566 }}
```

Una vez subidos los cambios quedan así las ramas. He hecho que la rama de producción dependa de la de preproducción porque así sería más seguro que todo se prueba bien antes de llegar a producción, pero depende del proyecto puede ser útil hacer pruebas rápidas en preproducción sin que afecten a producción y se podrían hacer en paralelo.

My first CI/CD pipeline
Modificar secret de stagin #31

Summary

Triggered via push 9 hours ago
adrianavillar pushed ~ 01248ad main

Status: Success | Total duration: 6m 19s | Artifacts: 1

main.yaml
on: push

build → 21s → test → 3m 27s → qa → 24s → stage → 24s → deploy → 1m 14s

Jobs: build, test, qa, stage, deploy

Run details: Usage, Workflow file

Ya podemos pasar la issue a terminado:

moviecards

View 1 | + New view

Filter by keyword or by field

Todo	In Progress	Done
This item hasn't been started	This is actively being worked on	This has been completed
moviecard #15 Modificar modelo y lógica para manejar fecha de fallecimiento		moviecard #2 Añadir color de fondo a la página principal
moviecard #16 Modificar tests unitarios para manejar fecha de fallecimiento		moviecard #3 Añadir color al título de la página principal
moviecard #17 Actualizar pruebas de integración para incluir fecha de fallecimiento en actores		moviecard #9 Modificar el código de la aplicación en src/main
moviecard #18 Actualizar pruebas de integración para incluir fecha de fallecimiento en actores		moviecard #10 Modificar el código de las pruebas en src/test
moviecard #19		moviecard #14 Agregar trabajo "stage" al workflow para pre-producción

5.2) 5.3) 5.4) 5.5)

He hecho los cambios en las clases necesarias, además de agregar el campo deadDate y modificar los tests unitarios, de integración y end to end.

```

53
54
55 @Test
56     void testSetGetDeadDate() {
57         Date deadDateExample = new Date();
58         actor.setDeadDate(deadDateExample);
59         assertEquals(deadDateExample, actor.getDeadDate());
60

```

```

@Test -> adrianavillar
public void testSaveActor() {
    Actor actor = new Actor();
    actor.setName("actor");
    actor.setBirthDate(new Date());
    actor.setCountry("spain");
    actor.setDeadDate(new Date());

    Actor savedActor = actorJPA.save(actor);

    assertNotNull(savedActor.getId());

    Optional<Actor> foundActor = actorJPA.findById(savedActor.getId());

    assertTrue(foundActor.isPresent());
    assertEquals(savedActor, foundActor.get());
}

```

```

@Test -> adrianavillar
public void testPageLoad() {
    driver.get("http://localhost:8089/actors/new");
    assertEquals( expected: "FichasPelículasApp | Aplicación de gestión de fichas de películas", driver.getTitle());

    assertTrue(driver.findElement(By.id("name")).isDisplayed());
    assertTrue(driver.findElement(By.id("birthDate")).isDisplayed());
    assertTrue(driver.findElement(By.id("country")).isDisplayed());
    assertTrue(driver.findElement(By.id("deadDate")).isDisplayed());
}

```

```

@Test -> adrianavillar
public void testListActors() {
    driver.get("http://localhost:8089/actors");
    WebElement title = driver.findElement(By.className("card-header"));
    assertEquals( expected: "Listado Actores", title.getText());

    WebElement table = driver.findElement(By.className("table-hover"));

    WebElement thead = table.findElement(By.tagName("thead"));
    assertTrue(thead.isDisplayed());

    WebElement headerRow = thead.findElement(By.tagName("tr"));
    assertEquals( expected: "Identificador", headerRow.findElements(By.tagName("th")).get(0).getText());
    assertEquals( expected: "Nombre", headerRow.findElements(By.tagName("th")).get(1).getText());
    assertEquals( expected: "Fecha Nacimiento", headerRow.findElements(By.tagName("th")).get(2).getText());
    assertEquals( expected: "País", headerRow.findElements(By.tagName("th")).get(3).getText());
    assertEquals( expected: "Fecha Fallecimiento", headerRow.findElements(By.tagName("th")).get(4).getText());
    assertEquals( expected: "Editar", headerRow.findElements(By.tagName("th")).get(5).getText());

}

```

Antes de subirlos he comprobado que todos los tests pasaran y así corregir los que no.



Como no estoy en la rama main el paso de deploy se lo salta pero podemos ver que todos los tests han pasado correctamente.

Y dentro de la aplicación vemos que se muestra correctamente la columna de deadDate y en el formulario se ha añadido correctamente el campo:

Listado Actores					
Identificador	Nombre	Fecha Nacimiento	País	Fecha Fallecimiento	Editar
1	Katy Perry	05-07-1998	EEUU	05-07-1999	<button>Editar</button>
2	Lady Gaga	05-07-1998	EEUU	05-07-1999	<button>Editar</button>

[Volver a la Página de Inicio](#)

He añadido un nuevo actor para comprobar el funcionamiento y podemos ver como se ha agregado en el listado de actores.

Editar Actor

Actor actualizado correctamente

Nombre	<input type="text" value="Harry"/>
Fecha nacimiento	<input type="text" value="01/02/2003"/> □
País	<input type="text" value="España"/>
Fecha fallecimiento	<input type="text" value="20/01/2023"/> □

Guardar

No hay ninguna película registrada en la que haya participado este actor

[Volver a la Página de Inicio](#) [Volver al listado de actores](#)

Listado Actores					
Identificador	Nombre	Fecha Nacimiento	País	Fecha Fallecimiento	Editar
1	Katy Perry	05-07-1998	EEUU	05-07-1999	<button>Editar</button>
2	Lady Gaga	05-07-1998	EEUU	05-07-1999	<button>Editar</button>
3	Harry	01-02-2003	España	20-01-2023	<button>Editar</button>

[Volver a la Página de Inicio](#)

He mergeado la rama que he creado con mi rama main:

 **Require approval from specific reviewers before merging**

Rulesets ensure specific people approve pull requests before they're merged.

[Add rule](#) X

 **All checks have passed** Hide all checks

4 successful and 1 skipped checks

 My first CI/CD pipeline / build (push)	Successful in 20s	Details
 My first CI/CD pipeline / test (push)	Successful in 3m	Details
 My first CI/CD pipeline / qa (push)	Successful in 24s	Details
 My first CI/CD pipeline / stage (push)	Successful in 34s	Details
 My first CI/CD pipeline / deploy (push)	Skipped	Details

 **This branch has no conflicts with the base branch**

Merging can be performed automatically.

[Merge pull request](#) ▼ You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

 Try the new merge experience

The screenshot shows a GitHub Actions pipeline summary. It indicates a successful merge pull request #24 from adrianavillar/añadir-campo-enddate #43. The pipeline was triggered via push 6 minutes ago. The status is Success, total duration is 6m 22s, and there is 1 artifact. The main.yaml workflow is shown with stages: build (20s), test (2m 20s), qa (25s), stage (35s), and deploy (2m 10s). The URL for the deployment is https://moviecards-pre-villar.azurewebsites.net.

Ya está subido en la rama principal y en deploy.

Ya podemos marcar como finalizadas las diferentes issues:

The screenshot shows a GitHub Issues board under the 'Done' column. There are five items listed, each with a checkmark and a user icon:

- moviecard #15: Modificar modelo y lógica para manejar fecha de fallecimiento
- moviecard #16: Modificar tests unitarios para manejar fecha de fallecimiento
- moviecard #17: Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- moviecard #18: Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- moviecard #2: (empty)

At the bottom, there is a '+ Add item' button.

5.6)

Primero desde sonarqube he modificado el número de critical issues por el que fallaría el despliegue a 4 (con 5 o más falla):

Conditions on Overall Code

Metric	Operator	Value	Actions
Critical Issues	is greater than	4	

You may click unlock to edit this quality gate. Adding extra conditions to a compliant quality gate can result in drawbacks. Are you reconsidering [Clean as You Code?](#) We strongly recommend this methodology to achieve a Clean Code status.

Luego he filtrado dentro de issues las que son críticas para poder modificarlas en el código:

Screenshot of SonarQube Issues page for the 'moviecards' project's 'main' branch. The page shows 1 / 8 issues found in 1h 12min effort.

Filters: My Issues, All

Issues in new code:

- Type:**
 - Bug: 0
 - Vulnerability: 2
 - Code Smell: 6
- Severity CRITICAL:**
 - Blocker: 2
 - Critical: 8
 - Minor: 7
 - Info: 42
 - Major: 1

Press ⌘ to add to selection

Scope: src/.../moviecards/controller/ActorController.java, src/.../moviecards/controller/MovieController.java

Issues:

- Define a constant instead of duplicating this literal "actor" 3 times. (11 days ago, L40%, design, Critical)
- Define a constant instead of duplicating this literal "title" 3 times. (11 days ago, L41%, design, Critical)
- Define a constant instead of duplicating this literal "actors/form" 4 times. (11 days ago, L42%, design, Critical)
- Replace this persistent entity with a simple POJO or DTO object. (11 days ago, L46%, cwe, owasp-a5, spring, Critical)
- Define a constant instead of duplicating this literal "movie" 3 times. (11 days ago, L40%, design, Critical)
- Define a constant instead of duplicating this literal "title" 3 times. (11 days ago, L41%, design, Critical)
- Define a constant instead of duplicating this literal "movies/form" 4 times. (11 days ago, L42%, design, Critical)
- Replace this persistent entity with a simple POJO or DTO object. (11 days ago, L46%, design, Critical)

He hecho en local los cambios correspondientes y lo he desplegado para comprobarlo:

```
private static final String ACTOR_ATTRIBUTE = "actor"; 3 usages
private static final String TITLE_ATTRIBUTE = "title"; 3 usages
private static final String ACTORS_FORM_ATTRIBUTE = "actors/form"; 4 usages
```

Podemos ver en sonarqube que hemos reducido los fallos críticos a dos:

Screenshot of SonarQube Issues page for the 'moviecards' project's 'main' branch. The page shows 1 / 2 issues found in 20min effort.

Filters: My Issues, All

Issues in new code:

- Type:**
 - Bug: 0
 - Vulnerability: 2
 - Code Smell: 0
- Severity CRITICAL:**
 - Blocker: 4
 - Critical: 2
 - Minor: 7
 - Info: 42
 - Major: 1

Press ⌘ to add to selection

Issues:

- Replace this persistent entity with a simple POJO or DTO object. (11 days ago, L49%, cwe, owasp-a5, spring, Critical)
- Replace this persistent entity with a simple POJO or DTO object. (11 days ago, L49%, cwe, owasp-a5, spring, Critical)

Y vemos que ha pasado sin problemas la fase de qa:

Screenshot of CircleCI build history for the 'main' branch. The build was triggered via push 6 minutes ago by adrianavillar.

Triggered via push 6 minutes ago	Status	Total duration	Artifacts
adrianavillar pushed -> d810513 main	Success	5m 27s	1

main.yaml

```
on: push
```

Build Pipeline:

```

graph LR
    build[build] -- 28s --> test[test]
    test -- 2m 21s --> qa[qa]
    qa -- 24s --> stage[stage]
    stage -- 34s --> deploy[deploy]
    
```

Artifacts deployed:

- https://moviecards-pre-villar.azurewebsites...
- https://moviecards-villar.azurewebsites...

Para finalizar he pasado la última issue a terminado:

The image shows a digital workspace interface with three main columns: 'Todo' (green circle), 'In Progress' (yellow circle), and 'Done' (purple circle). The 'Done' column is currently active, displaying five completed items:

- moviecard #19: Reducir problemas críticos en SonarQube a menos de 5
- moviecard #15: Modificar modelo y lógica para manejar fecha de fallecimiento
- moviecard #16: Modificar tests unitarios para manejar fecha de fallecimiento
- moviecard #17: Actualizar pruebas de integración para incluir fecha de fallecimiento en actores
- moviecard #18: [empty]

At the bottom of each column, there is a '+ Add item' button.

Y he cerrado la milestone:

The image shows a list of milestones in a digital workspace:

- Implementación de Fecha de Fallecimiento en MovieCards**
Closed now (Last updated less than a minute ago)
100% complete (6 closed)
Edit Reopen Delete
- Nueva versión moviercards para utilizar el nuevo servicio**
Closed 13 hours ago (Last updated about 14 hours ago)
100% complete (2 closed)
Edit Reopen Delete
- Aplicación con colores**
Closed 19 hours ago (Last updated about 19 hours ago)
Se añadirán colores a la página principal de la aplicación index.html
100% complete (4 closed)
Edit Reopen Delete