

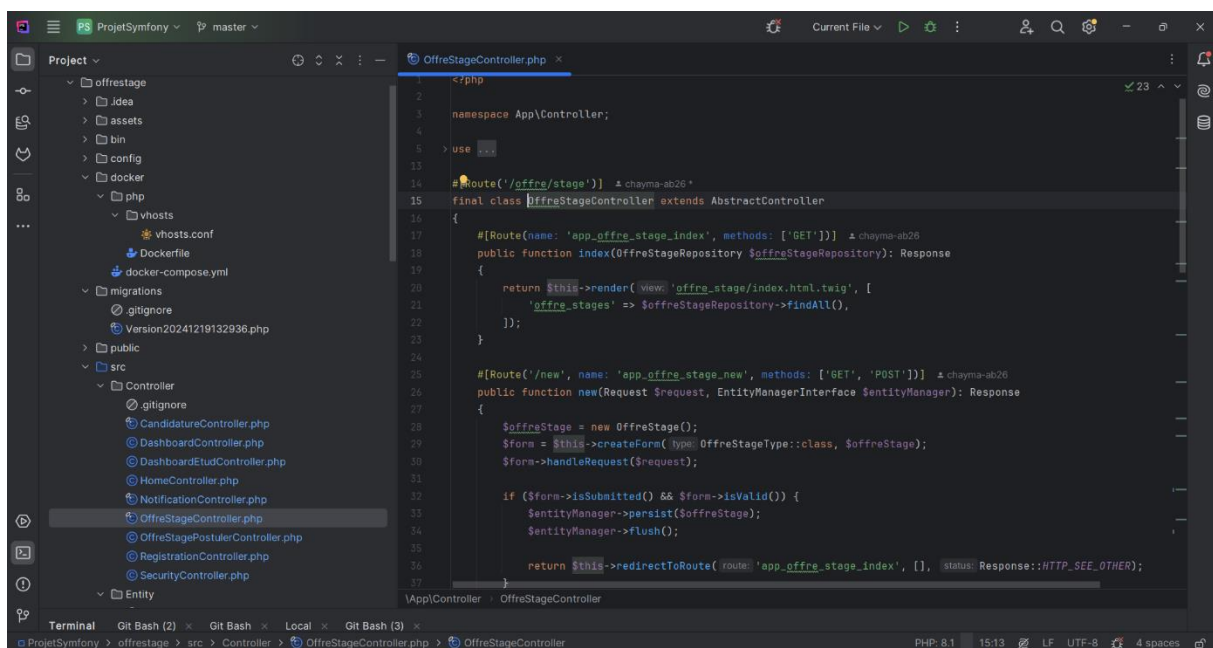
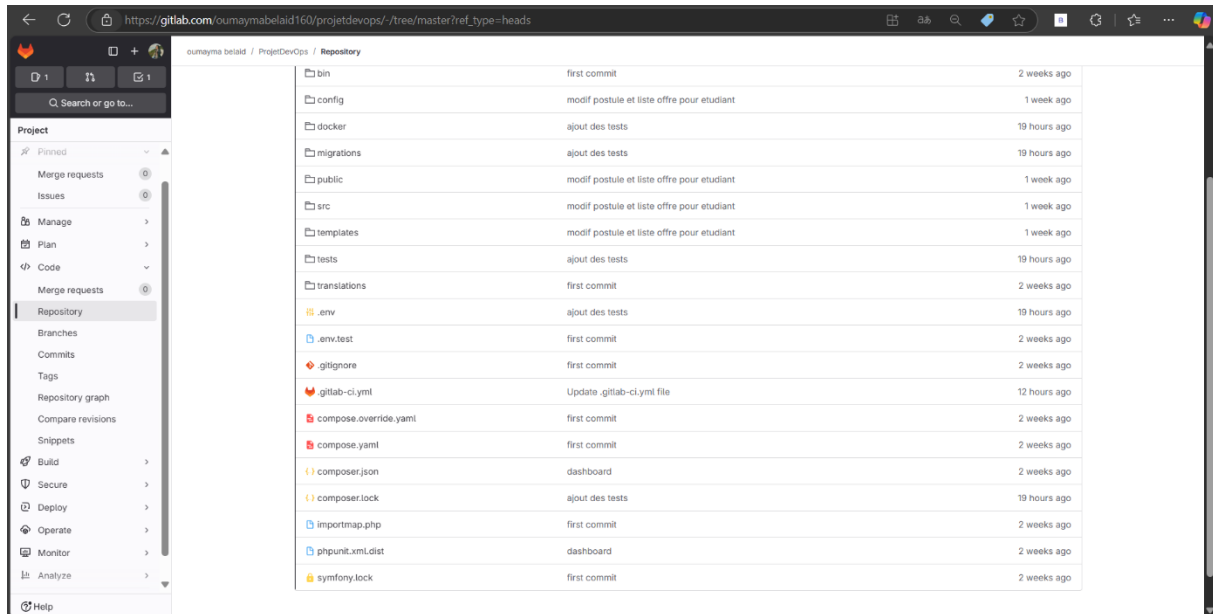
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GLSI -A

Projet DevOps

Implémenter un pipeline CI/CD à l'aide de GitLab CI dans le cadre d'une démarche DevOps du développement de notre projet Symfony de groupe en cours.



```

user@hp MINGW64 ~/Desktop/ProjetSymfony/offrestage/docker (master)
$ docker-compose up -d
[+] Running 4/4
✔ Network offrestage_default Created 0.0s
✔ Volume "offrestage_database_data" Created 0.0s
✔ Container offrestage-mailer-1 Star... 0.5s
✔ Container offrestage-database-1 St... 0.6s

```

The screenshot shows the Docker Desktop interface. On the left, the 'Containers' tab is selected, showing two containers: 'offrestage-database-1' (postgres:16-alpine) and 'offrestage-mailer-1' (axllent/mailpit). The main panel displays the logs for the 'offrestage' service. The logs show the database initialization process, including the creation of the database, the server starting, and the mailer container waiting for the database to be ready. The logs also show the database system shutting down and then starting again.

The screenshot shows a web browser displaying the Symfony 6.4.16 welcome page. The page has a dark green background with the Symfony logo and the text 'Welcome to Symfony 6.4.16'. Below the logo, there is a green checkmark icon and the text '/var/www/'. At the bottom of the page, there is a status bar showing '404', '7377 ms', '4.0 MB', '1', 'n/a', 'P 178 ms', and '6.4.16'.

- Générer et raffiner les différents types de tests (unitaires, d'intégration, fonctionnels, et analyse de code) :

Les tests unitaires : Vérifie une unité de code isolée, comme une fonction.

```

1  use PHPUnit\Framework\TestCase;
2
3  class CandidatureTest extends TestCase {
4
5      public function testGettersAndSetters() {
6          $candidature = new Candidature();
7
8          // Tester les setters et getters
9          $dateSoumission = new DateTime();
10         $candidature->setDateSoumission($dateSoumission);
11         $this->assertEquals($dateSoumission, $candidature->getDateSoumission());
12
13         $candidature->setCv('path/to/cv.pdf');
14         $this->assertEquals('path/to/cv.pdf', $candidature->getCv());
15
16         $candidature->setLettreDeMotivation('path/to/letter.pdf');
17
18         // ...
19     }
20 }

```

```

$ php bin/phpunit tests/Unit/CandidatureTest.php
PHPUnit 9.6.22 by Sebastian Bergmann and contributors.

Testing App\Tests\Unit\CandidatureTest
.
Time: 00:00.013, Memory: 6.00 MB

OK (1 test, 3 assertions)

```

```

1  <?php
2
3  namespace App\Tests\Unit;
4
5  use App\Entity\User;
6  use PHPUnit\Framework\TestCase;
7
8  class UserTest extends TestCase {
9
10     public function testSetEmail() {
11         $user = new User();
12         $user->setEmail('test@example.com');
13         $this->assertEquals('test@example.com', $user->getEmail());
14     }
15
16     public function testSetPassword() {
17         // ...
18     }
19 }

```

```

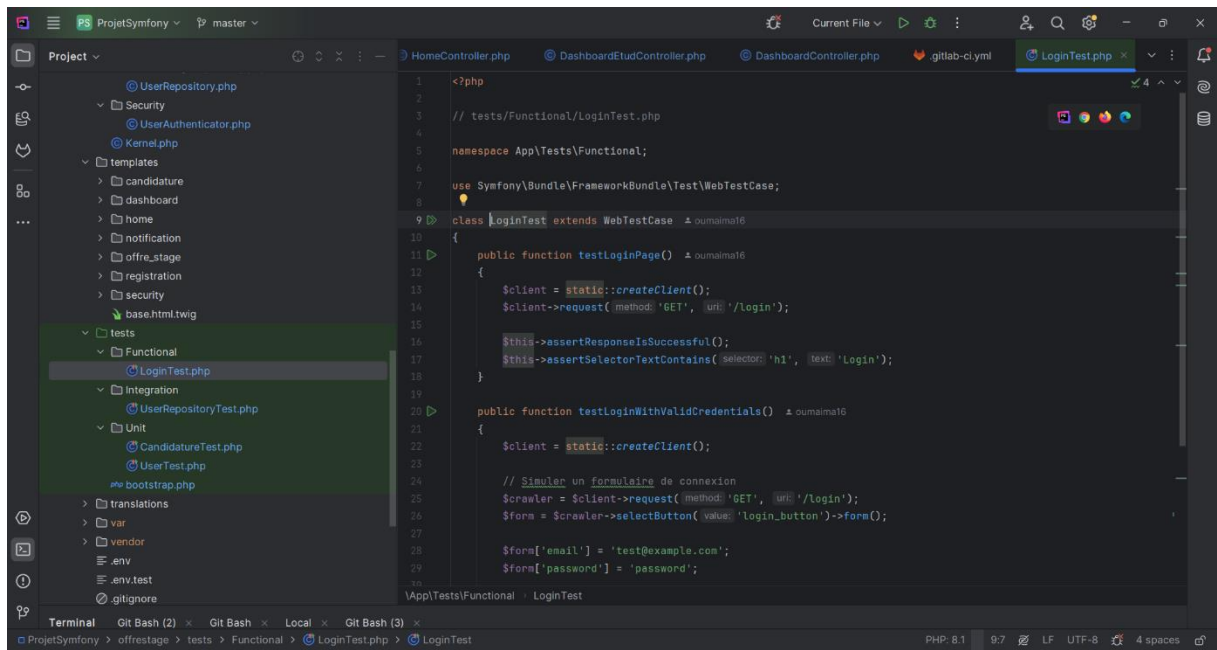
$ php bin/phpunit tests/Unit/UserTest.php
PHPUnit 9.6.22 by Sebastian Bergmann and contributors.

Testing App\Tests\Unit\UserTest
..
Time: 00:00.015, Memory: 6.00 MB

OK (2 tests, 2 assertions)

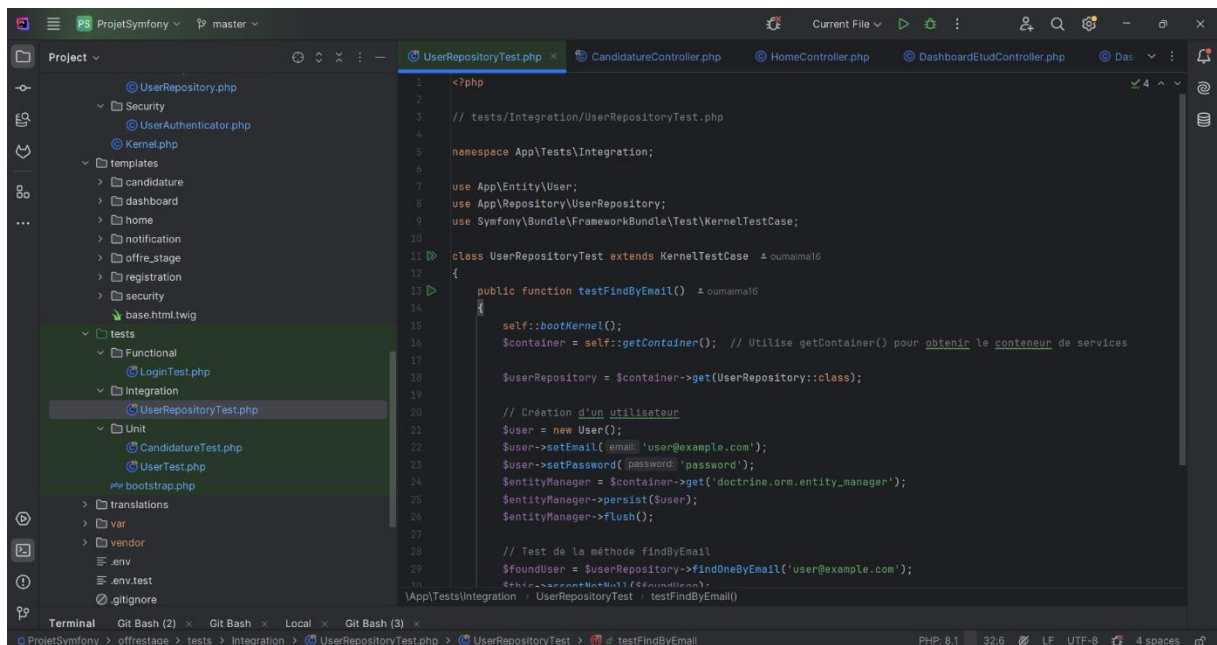
```

Test fonctionnel : Valide le comportement global selon les besoins utilisateur.



```
1 <?php
2
3 // tests/Functional/LoginTest.php
4
5 namespace App\Tests\Functional;
6
7 use Symfony\Bundle\FrameworkBundle\Test\WebTestCase;
8
9 class LoginTest extends WebTestCase
10 {
11     public function testLoginPage()
12     {
13         $client = static::createClient();
14         $client->request('GET', '/login');
15
16         $this->assertResponseIsSuccessful();
17         $this->assertSelectorTextContains('h1', 'Login');
18     }
19
20     public function testLoginWithValidCredentials()
21     {
22         $client = static::createClient();
23
24         // Simuler un formulaire de connexion
25         $crawler = $client->request('GET', '/login');
26         $form = $crawler->selectButton('login_button')->form();
27
28         $form['email'] = 'test@example.com';
29         $form['password'] = 'password';
30
31         $client->submit($form);
32
33         $this->assertResponseIsSuccessful();
34     }
35 }
```

Test d'intégration : Assure la bonne interaction entre différents modules



```
1 <?php
2
3 // tests/Integration/UserRepositoryTest.php
4
5 namespace App\Tests\Integration;
6
7 use App\Entity\User;
8 use App\Repository\UserRepository;
9 use Symfony\Bundle\FrameworkBundle\Test\KernelTestCase;
10
11 class UserRepositoryTest extends KernelTestCase
12 {
13     public function testFindByEmail()
14     {
15         self::bootKernel();
16         $container = self::getContainer(); // Utilise getContainer() pour obtenir le conteneur de services
17
18         $userRepository = $container->get(UserRepository::class);
19
20         // Création d'un utilisateur
21         $user = new User();
22         $user->setEmail('user@example.com');
23         $user->setPassword('password');
24         $entityManager = $container->get('doctrine.orm.entity_manager');
25         $entityManager->persist($user);
26         $entityManager->flush();
27
28         // Test de la méthode findByEmail
29         $foundUser = $userRepository->findOneByEmail('user@example.com');
30
31         $this->assertNotNull($foundUser);
32     }
33 }
```

Pipeline :

← ↻ 🔒 https://gitlab.com/oumaymabelaid160/projetdevops/-/pipelines/1596676479

oumayma belaid / ProjetDevOps / Pipelines / #1596676479

Update .gitlab-ci.yml file

✓ Passed oumayma belaid created pipeline for commit 2276f1ca 2 hours ago, finished 1 hour ago

For `master`

latest 5 jobs 38.28 38 minutes 16 seconds, queued for 1 seconds

Pipeline Jobs 5 Tests 0

SecurityChecker
✓ security-checker

CodingStandards
✓ twig-lint

UnitTests
✓ phpunit

FunctionalTests
✓ functional-tests

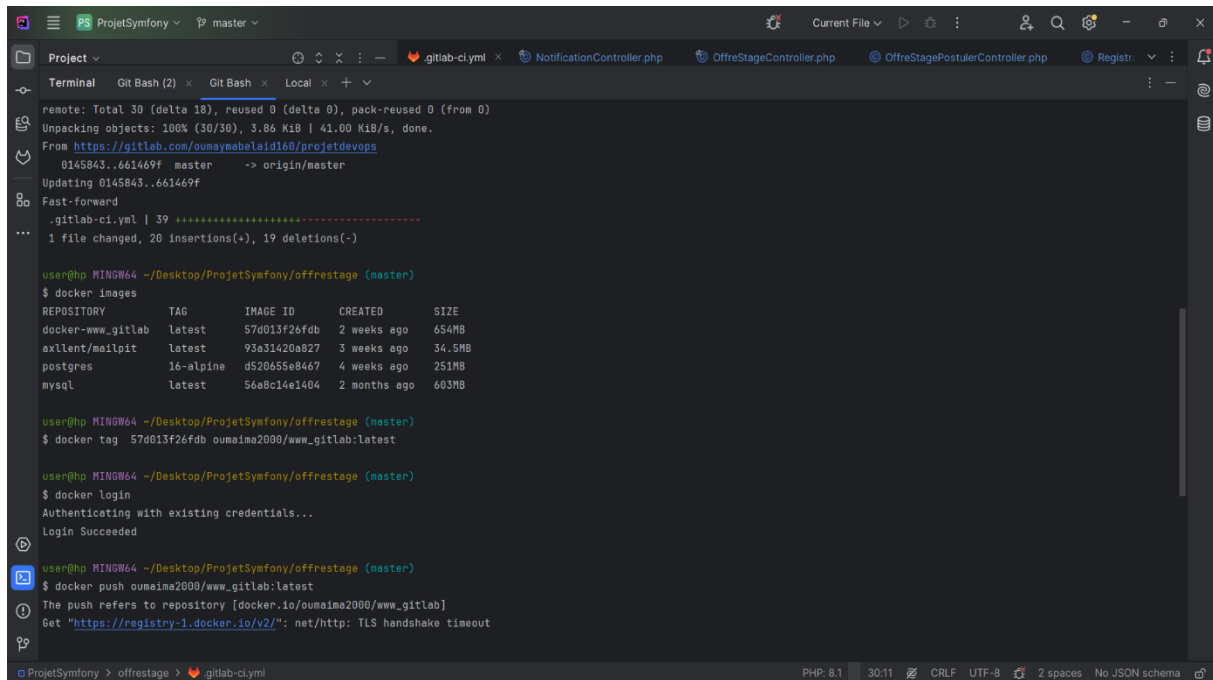
IntegrationTests
✓ integration-tests

[Sans titre]

oumayma belaid / ProjetDevOps / Repository

```
1 # Déclaration de l'image Docker à utiliser pour le pipeline
2 image: jakzt/php:php8.2-onion
3
4 before-script:
5   - composer install
6
7 # Mise en cache pour optimiser les installations Composer
8 cache:
9   paths:
10     - vendor/
11
12 # Phases du pipeline
13 stages:
14   - SecurityChecker
15   - CodingStandards
16   - UnitTests
17   - FunctionalTests
18   - IntegrationTests
19   - deploy
20
21 # Etape 1 : Vérification des failles de sécurité
22 security-checker:
23   stage: SecurityChecker
24   script:
25     - composer self-update
26     - composer audit
27   allow_failure: false
28
29 # Etape 2 : Analyse statique avec Telp, PHPStan, et PHP CS Fixer
30 twig-lint:
31   stage: CodingStandards
32   script:
33     - twig-lint lint ./templates
34   allow_failure: false
35
36 # Etape 3 : Exécution des tests unitaires
37 phpunit:
38   stage: UnitTests
39   script:
40     - php bin/phpunit --testsuite=unit
41   allow_failure: false
42
43 # Etape 4 : Exécution des tests fonctionnels
44 functional-tests:
45   stage: FunctionalTests
46   script:
47     - php bin/phpunit --testsuite=functional
48   allow_failure: false
49
50 # Etape 5 : Exécution des tests d'intégration
51 integration-tests:
52   stage: IntegrationTests
53   script:
54     - php bin/phpunit --testsuite=integration
55   allow_failure: false
```

Déployer une version dockerisée de l'application sur Docker Hub



The screenshot shows a VS Code terminal window with the following commands and output:

```
remote: Total 30 (delta 10), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (30/30), 3.86 KiB | 41.00 KiB/s, done.
From https://gitlab.com/oumaina2000/projetdevops
0145843..661469f master -> origin/master
Updating 0145843..661469f
Fast-forward
 .gitlab-ci.yml | 39 ++++++
 1 file changed, 20 insertions(+), 19 deletions(-)

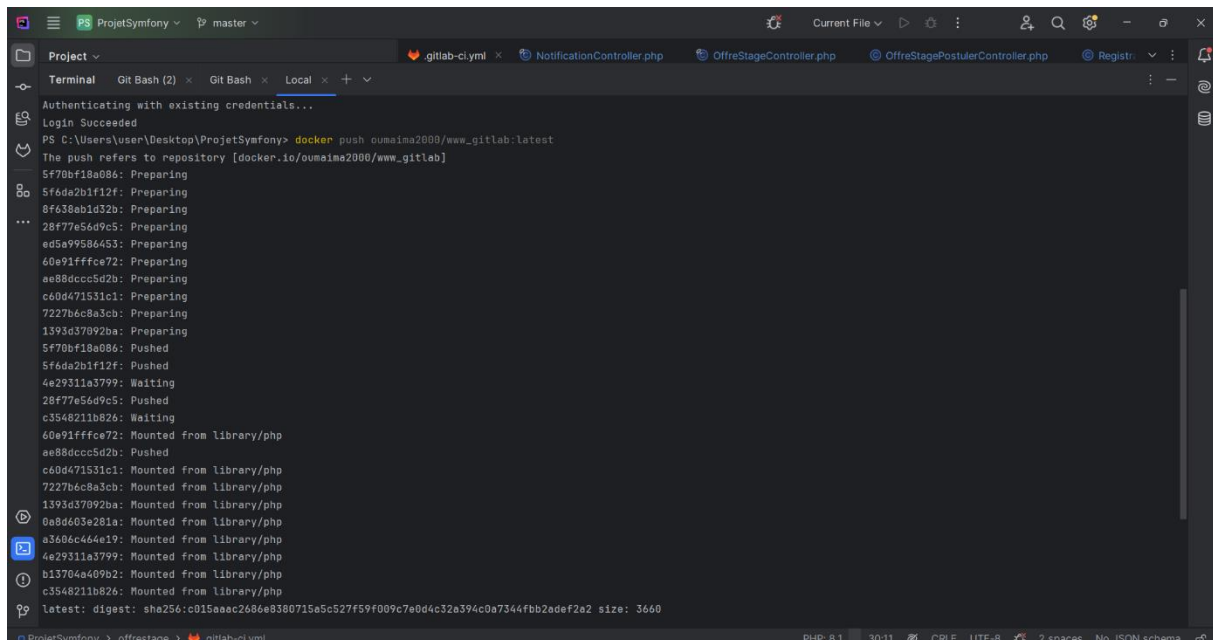
user@bhp MINGW64 ~/Desktop/ProjetSymfony/offrestage (master)
$ docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
docker-wwww.gitlab   latest          57d013f26fdb    2 weeks ago    654MB
axllent/mailpit      latest          93a31420a827    3 weeks ago    34.5MB
postgres             16-alpine      d520655e8467    4 weeks ago    251MB
mysql                latest          56a8c14e1404    2 months ago   603MB

user@bhp MINGW64 ~/Desktop/ProjetSymfony/offrestage (master)
$ docker tag 57d013f26fdb oumaina2000/www_gitlab:latest

user@bhp MINGW64 ~/Desktop/ProjetSymfony/offrestage (master)
$ docker login
Authenticating with existing credentials...
Login Succeeded

user@bhp MINGW64 ~/Desktop/ProjetSymfony/offrestage (master)
$ docker push oumaina2000/www_gitlab:latest
The push refers to repository [docker.io/oumaina2000/www_gitlab]
Get "https://registry-1.docker.io/v2/": net/http: TLS handshake timeout
```

The status bar at the bottom indicates the current file is `gitlab-ci.yml` in the `offrestage` directory of the `ProjetSymfony` project.



The screenshot shows the continuation of the Docker push process from the previous terminal window:

```
Authenticating with existing credentials...
Login Succeeded
PS C:\Users\user\Desktop\ProjetSymfony> docker push oumaina2000/www_gitlab:latest
The push refers to repository [docker.io/oumaina2000/www_gitlab]
5f70bf18a086: Preparing
5f6da2b1f12f: Preparing
8f638eb1d32b: Preparing
...
28f77e56d9c5: Preparing
ed5a99586453: Preparing
60e91ffffe72: Preparing
ae88dccc5d2b: Preparing
c60d471531c1: Preparing
7227b6c8a3cb: Preparing
1393d37092ba: Preparing
5f70bf18a086: Pushed
5f6da2b1f12f: Pushed
4e29311a3799: Waiting
28f77e56d9c5: Pushed
c3548211b826: Waiting
60e91ffffe72: Mounted from library/php
ae88dccc5d2b: Pushed
c60d471531c1: Mounted from library/php
7227b6c8a3cb: Mounted from library/php
1393d37092ba: Mounted from library/php
0a8d603e281a: Mounted from library/php
a3606c44e19: Mounted from library/php
4e29311a3799: Mounted from library/php
b13704a409b2: Mounted from library/php
c3548211b826: Mounted from library/php
latest: digest: sha256:c015a0ac2686e9380715a5c527f59f009c7e0d4c32a394c0a7344fbb2edef2a2 size: 3660
```

The status bar at the bottom remains the same, showing the `gitlab-ci.yml` file in the `offrestage` directory.

