

►Réaliser les tests d'intégration et d'acceptation d'un service

Pour tester le site que je crée pour mon employeur, j'ai eu l'occasion de tester le code sur PHPUnit pour bien vérifier que celui-ci est adapté et fonctionne correctement.

Code

src/Email.php

```
<?php declare(strict_types=1);
final class Email
{
    private $email;

    private function __construct(string $email)
    {
        $this->ensureIsValidEmail($email);

        $this->email = $email;
    }

    public static function fromString(string $email): self
    {
        return new self($email);
    }

    public function __toString(): string
    {
        return $this->email;
    }

    private function ensureIsValidEmail(string $email): void
    {
        if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
            throw new InvalidArgumentException(
                sprintf(
                    '"%s" is not a valid email address',
                    $email
                )
            );
        }
    }
}
```

Test Code

tests/EmailTest.php

```
<?php declare(strict_types=1);
use PHPUnit\Framework\TestCase;

final class EmailTest extends TestCase
{
    public function testCanBeCreatedFromValidEmailAddress(): void
    {
        $this->assertInstanceOf(
            Email::class,
            Email::fromString('user@example.com')
        );
    }

    public function testCannotBeCreatedFromInvalidEmailAddress(): void
    {
        $this->expectException(InvalidArgumentException::class);

        Email::fromString('invalid');
    }

    public function testCanBeUsedAsString(): void
    {
        $this->assertEquals(
            'user@example.com',
            Email::fromString('user@example.com')
        );
    }
}
```

Test Execution

PHP Archive (PHAR)

```
→ ./phpunit --bootstrap src/autoload.php tests
PHPUnit 9.0.0 by Sebastian Bergmann and contributors.

...

Time: 70 ms, Memory: 10.00MB

OK (3 tests, 3 assertions)
```

Composer

```
→ ./vendor/bin/phpunit tests
PHPUnit 9.0.0 by Sebastian Bergmann and contributors.

...

Time: 70 ms, Memory: 10.00MB

OK (3 tests, 3 assertions)
```