

CQRS

CQRS is one of the most overcomplicated and misunderstood aspects of DDD, in my opinion, so let's clarify it! It means Command and Query Responsibility Segregation. It's a complicated name; let's see what those words mean:

- A command is a write operation such as creating a new product.
- A query is a read operation such as getting all products.
- Responsibility segregation means we need to separate these two types of functions.

So this simple class does not satisfy CQRS:

```
class ProductService
{
    public function create(ProductData $data): Product
    {
        // ...
    }

    public function getAll(): Collection
    {
        // ...
    }
}
```

I don't think there is anything wrong with this class; in fact, **it can be the superior solution** in many projects.

So how do we apply CQRS? If you think about the previous sections, we have similar concepts to commands and queries. The only difference is the name:

- Actions play the role of a command or a write operation.
- ViewModels play the role of a query or a read operation.