



### Basic Commands

#### Console Commands

<code>php bin/console list</code>	Lists all available console commands.
<code>php bin/console help &lt;command&gt;</code>	Displays help for a specific command.
<code>php bin/console new:controller</code>	Generates a new controller.
<code>php bin/console make:entity</code>	Creates a new entity.
<code>php bin/console doctrine:migrations:migrate</code>	Executes pending database migrations.
<code>php bin/console cache:clear</code>	Clears the application cache.
<code>php bin/console server:run</code>	Starts the built-in PHP web server.
<code>php bin/console debug:router</code>	Lists all defined routes.

#### Environment Variables

Environment variables are defined in `.env` file. Use `$_ENV['VARIABLE_NAME']` or `getenv('VARIABLE_NAME')` to access them.

Example:

```
APP_ENV=dev
APP_SECRET=s3cretf0rt3st
```

In your code:

```
$appEnv = $_ENV['APP_ENV'];
```

### Routing

#### Route Annotations

```
Example of using annotations for routing in a controller:

use
Symfony\Component\Routing\Annotation\Route;

class MyController extends AbstractController
{
    /**
     * @Route("/my-route",
     name="my_route_name")
     */
    public function myAction()
    {
        // ...
    }
}
```

#### Route Parameters

Required Parameter	<code>@Route("/blog/{id}", name="blog_show")</code>
Optional Parameter	<code>@Route("/blog/{id?}", name="blog_show")</code>
Parameter with Requirements	<code>@Route("/blog/{id}", name="blog_show", requirements={"id"="\d+"})</code>

#### Generating URLs

```
Generating URLs in your code:

$url = $this->generateUrl(
    'route_name',
    ['id' => 123]
);
```

### Controllers and Views

#### Controller Basics

```
A simple controller example:

use
Symfony\Bundle\FrameworkBundle\Controller\AbstractController;
use Symfony\Component\HttpFoundation\Response;
use Symfony\Component\Routing\Annotation\Route;

class MyController extends AbstractController
{
    /**
     * @Route("/", name="homepage")
     */
    public function index(): Response
    {
        return $this->render('index.html.twig', [
            'controller_name' =>
            'MyController',
        ]);
    }
}
```

#### Rendering Templates

Rendering a template	<code>\$this-&gt;render('template.html.twig', ['name' =&gt; \$name]);</code>
Rendering a template with HTTP status	<code>\$this-&gt;render('template.html.twig', ['name' =&gt; \$name], new Response(null, 201));</code>

#### Passing Data to Templates

```
Example of passing data to a Twig template:

return $this->render('profile.html.twig', [
    'name' => $user->getName(),
    'age' => $user->getAge(),
]);
```

### Services and Dependency Injection

## Defining Services

Services are typically defined in `config/services.yaml`:

```
services:
  App\MyService:
    arguments: ['@logger']
```

## Using Services

```
In a Controller: public function index(MyService $myService)
{
    $myService->doSomething();
}
```

**Autowiring**    Symfony automatically injects services based on type hints.

## Service Tags

Example of tagging a service:

```
services:
  App\MyEventListener:
    tags:
      - { name: 'kernel.event_listener',
        event: 'kernel.request', method: 'onKernelRequest' }
```