

Anatomía de un módulo en Drupal 8



Javier Gómez

Drupal Backend Developer (EUIPO)

www.codigoweb.es

[@fjgomez2](https://twitter.com/fjgomez2)



Evolución del código en Drupal

Drupal 7

- Hooks



Drupal 8

- Algunos Hooks
- Symfony



Drupal 9

- Symfony



Symfony y Drupal 8

Componentes heredados de Symfony2:

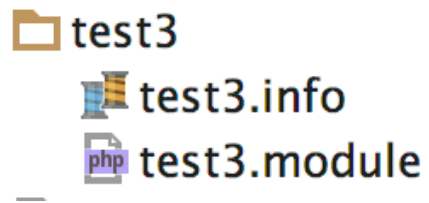
- **Routing**
- **HttpFoundation**
- Debug
- **DependencyInjection**
- Validator
- **Yaml**
- Serializer
- Twig
- EventDispatcher
- ClassLoader
- HttpKernel



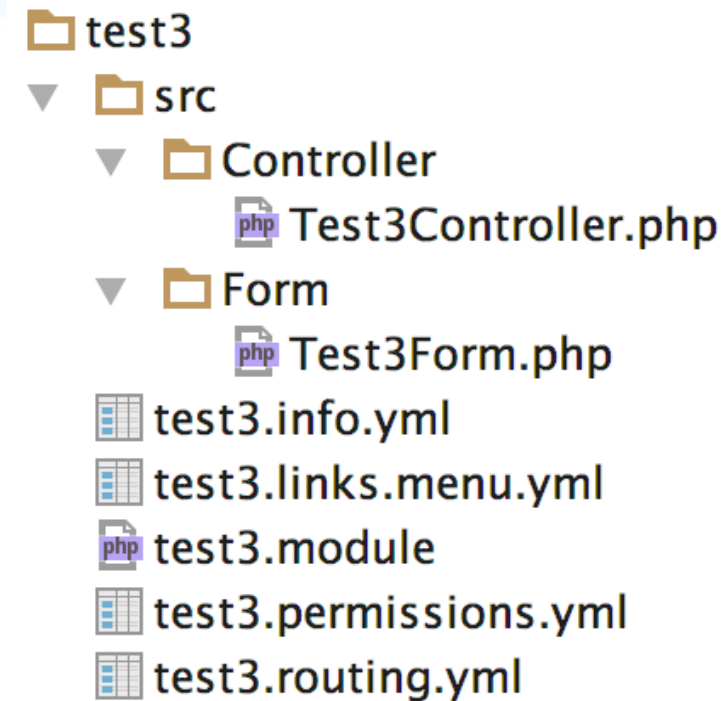
Estructura Básica

Archivos y Carpetas

- {drupal_path}/sites/all/modules



- {drupal_path}/modules



Info



- Archivo de instalación
- Contiene la información básica del módulo
- Muy similar en ambas versiones



{path_module}/test3.info

```
name = Test 3
description = Descripción del modulo Test 3
core = 7.x
package = "Other"

configure = admin/config/user-interface/test3
```

{path_module}/test3.info.yml

```
name: Test 3
type: module
description: Sample test module
core: 8.x
package: Custom
configure: test3.settings
```

Menús, alias y rutas

hook_menu vs routing



- Test3.module
 - Hook_menu()

```
function test3_menu() {  
  $items = array();  
  
  $items['test3'] = array(  
    'title' => 'Test 3',  
    'page callback' => 'test1_callback',  
    'description' => 'Test 3 link menu',  
    'access arguments' => array('access content'),  
    'type' => MENU_NORMAL_ITEM,  
  );  
}
```



- test3.routing.yml

```
test3.test:  
  path: /test3  
  defaults:  
    _controller: Drupal\test3\Controller\Test3Controller::test  
  requirements:  
    _permission: 'access content'
```

- test3.links.menu.yml

```
} test3.test:  
  title: 'Test 3'  
} route_name: test3.test
```

Routing



module_name.routing.yml

test3.routing.yml

```
test3.test:
  path: /test3
  defaults:
    _controller: Drupal\test3\Controller\Test3Controller::test
  requirements:
    _permission: 'access content'

test3.settings:
  path: /admin/config/development/test3
  defaults:
    _form: 'Drupal\test3\Form\Test3Form'
    _title: 'Test 3 Configuration'
  requirements:
    _permission: 'test3 config'
```

- Ruta
- Path
- Controller
- Permisos
- Formulario

Controller



- test3.routing.yml
 - Namespace\Class::Method

```
defaults:  
  _controller: Drupal\test3\Controller\Test3Controller::test
```

- Src/Controller/Test3Controller.php

```
class Test3Controller extends ControllerBase {  
  
    public function test(){  
        $body = $this->config('test3.settings')->get('test3.body');  
        $build = array(  
            '#title' => $this->config('test3.settings')->get('test3.page_title'),  
            '#markup' => $body,  
        );  
        return $build;  
    }  
}
```


Configuración



- Hook_menu()

```
$items['admin/config/user-interface/test3'] = array(  
  'title' => 'Test 3 Configuration',  
  'description' => 'Configuration for Test 3 module',  
  'page callback' => 'drupal_get_form',  
  'page arguments' => array('test3_settings'),  
  'access arguments' => array('administer test3'),  
);
```

- Formulario (Callback function)

```
function test3_settings() {  
  $form['config'] = array(  

```

```
    $form['config']['test3_message'] = array(  
      '#type' => 'textarea',  
      '#title' => t('Message'),  
      '#default_value' => variable_get('test3_message', 'Te  
      '#description' => t("Type your message."),  
      '#required' => TRUE  
    );  
  
    return system_settings_form($form);  
  }  
}
```



- test3.routing.yml

```
test3.settings:  
  path: /admin/config/development/test3  
  defaults:  
    _form: 'Drupal\test3\Form\Test3Form'  
    _title: 'Test 3 Configuration'  
  requirements:  
    _permission: 'test3 config'
```

- Formulario

- Parecido a Controller (namespace/class)
- {module_path}/src/Form/{class_name}.php

```
namespace Drupal\test3\Form;  
  
use Drupal\Core\Form\ConfigFormBase;  
use Drupal\Core\Form\FormStateInterface;  
  
class Test3Form extends ConfigFormBase {  

```

Configuración



- **getFormId()**
 - Lo usamos para especificar el id al formulario.
- **getEditableConfigNames()**
 - Lee el nombre de variable de configuración que será editable.
- **submitForm(array &\$form, FormStateInterface \$form_state)**
- **buildForm(array \$form, FormStateInterface \$form_state)**
- **validateForm(array &\$form, FormStateInterface \$form_state)**

ConfigFormBase FormStateInterface



- **\$form_id**
- **form_submit()**
- **hook_form()**
- **form_validate()**

Configuración



Formulario

- **getFormId()**

```
public function getFormId() {  
    return 'hello_world_form';  
}
```

- **validateForm()**

```
public function validateForm(array &$form, FormStateInterface $form_state) {  
    if ($form_state->isValueEmpty('page_title')) {  
        $form_state->setErrorByName('hello_world_config', $this->t('Page title is empty.));  
        return;  
    }  
}
```

- **getEditableConfigNames()**

```
protected function getEditableConfigNames() {  
    return [  
        'test3.settings',  
    ];  
}
```

- **submitForm()**

```
public function submitForm(array &$form, FormStateInterface $form_state) {  
    $config = $this->config('test3.settings');  
    $config->set('test3.body', $form_state->getValue('body'));  
    $config->set('test3.page_title', $form_state->getValue('page_title'));  
    $config->save();  
    return parent::submitForm($form, $form_state);  
}
```

Configuración

Formulario

- **buildForm()**

```
public function buildForm(array $form, FormStateInterface $form_state) {  
    // Form constructor  
    $form = parent::buildForm($form, $form_state);  
    // Default settings  
    $config = $this->config('hello_world.settings');  
  
    // Page title field  
    $form['page_title'] = array(  
        '#type' => 'textfield',  
        '#title' => $this->t('Hello World - Page title:'),  
        '#default_value' => $config->get('hello_world.page_title'),  
        '#description' => $this->t('Page title for Hello World page.'),  
    );  
    // Source text field  
    $form['body'] = array(  
        '#type' => 'textarea',  
        '#title' => $this->t('Hello World - Body:'),  
        '#default_value' => $config->get('hello_world.body'),  
        '#description' => $this->t('Body for Hello World page.'),  
    );  
  
    return $form;  
}
```



Configuración

Formulario

```
function test3_settings() {  
  $form['config'] = array(  
    '#type' => 'fieldset',  
    '#title' => t('Configuration'),  
  );  
  
  $form['config']['test3_title'] = array(  
    '#type' => 'textfield',  
    '#title' => t('Title'),  
    '#default_value' => variable_get('test3_title', 'Test 3 Title'),  
    '#description' => t("Type your Title."),  
    '#required' => TRUE  
  );  
  
  $form['config']['test3_message'] = array(  
    '#type' => 'textarea',  
    '#title' => t('Message'),  
    '#default_value' => variable_get('test3_message', 'Test 3 Message'),  
    '#description' => t("Type your message."),  
    '#required' => TRUE  
  );  
  
  return system_settings_form($form);  
}
```



Permisos



- Hook_menu()
 - Permisos custom

```
'access arguments' => array('administer test3'),
```

- Hook_permission()

```
function test3_permission() {  
  return array(  
    'administer test3' => array(  
      'title' => t('Configure Test 3 module'),  
    ),  
  );  
}
```



- test3.routing.yml
 - Permisos custom

```
requirements:  
  _permission: 'test3 config'
```

- Test3.permissions.yml

```
test3 config:  
  title: 'Acceso a configuración del módulo'  
  description: 'Permite a acceder a la configuración'
```


Ayuda



- **hook_help()** en {module_name}.module

```
/**
 * Implements hook_help().
 */
function test3_help($path, $arg) {
  switch ($path) {
    case 'admin/help#test3':
      $output = '';
      $output .= '<h3>' . t('About') . '</h3>';
      $output .= '<p>' . t('My Awesome Module') . '</p>';
      return $output;
    default:
  }
}
```



- **hook_help()** en {module_name}.module

```
use Drupal\Core\Routing\RouteMatchInterface;

function test3_help($route_name, RouteMatchInterface $route_match) {
  switch ($route_name) {
    case 'help.page.test3':
      $output = '';
      $output .= '<h3>' . t('About') . '</h3>';
      $output .= '<p>' . t('My Awesome Module') . '</p>';
      return $output;
    default:
  }
}
```


DEMO

<https://github.com/codigoweb-org/Drupal-8-Hello-World>





Preguntas?

Documentación

- <https://www.drupal.org/docs/8/creating-custom-modules>
- <https://www.drupal.org/docs/8/converting-drupal-7-modules-to-drupal-8>

Gracias!!



Javier Gómez

Drupal Backend Developer (EUIPO)

www.codigoweb.es

[@fjgomez2](https://twitter.com/fjgomez2)

www.linkedin.com/in/codigoweb

