

Zend Django App

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Capítulo 1

Modelos y Autenticación

1.1. `django.contrib.auth.backends`

- `BaseBackend`
- `ModelBackend`
- `AllowAllUsersModelBackend`
- `RemoteUserBackend`
- `AllowAllUsersRemoteUserBackend`

1.2. `django.contrib.auth.models`

- `User`
- `UserManager`
- `AnonymousUser`
- `Permission`
- `Group`

1.3. `django.contrib.auth.validators`

- `ASCIIUsernameValidator`
- `UnicodeUsernameValidator`

Capítulo 2

Base de Datos

2.1. auth_group

| Campo | Tipo | Pk | NN | U | Referencia |
|-------|--------------|-------------------------------------|-------------------------------------|-------------------------------------|------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| name | varchar(150) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |

2.2. auth_group_permissions

| Campo | Tipo | Pk | NN | U | Referencia |
|---------------|---------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| group_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | auth_group.id |
| permission_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | auth_permission.id |

Grupos únicos:

- (group_id, permission_id)

2.3. auth_permission

| Campo | Tipo | Pk | NN | U | Referencia |
|-----------------|--------------|-------------------------------------|-------------------------------------|-------------------------------------|------------------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| content_type_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | django.content_type.id |
| codename | varchar(100) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| name | varchar(255) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Grupos únicos:

- (content_type_id, codename)

2.4. auth_user

| Campo | Tipo | Pk | NN | U | Referencia |
|--------------|--------------|-------------------------------------|-------------------------------------|-------------------------------------|------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| password | varchar(128) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| last_login | datetime | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| is_superuser | bool | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| username | varchar(150) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| first_name | varchar(30) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| email | varchar(254) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| is_staff | bool | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| is_active | bool | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| date_joined | datetime | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| last_name | varchar(150) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

2.5. auth_user_groups

| Campo | Tipo | Pk | NN | U | Referencia |
|----------|---------|-------------------------------------|-------------------------------------|-------------------------------------|---------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| user_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | auth_user.id |
| group_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | auth_group.id |

Grupos únicos:

- (user_id, group_id)

2.6. auth_user_user_permissions

| Campo | Tipo | Pk | NN | U | Referencia |
|---------------|---------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| user_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | auth_user.id |
| permission_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | auth_permission.id |

Grupos únicos:

- (user_id, permission_id)

2.7. django_admin_log

| Campo | Tipo | Pk | NN | U | Referencia |
|-----------------|-------------------|-------------------------------------|-------------------------------------|-------------------------------------|------------------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| action_time | datetime | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| object_id | text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| object_repr | varchar(200) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| change_message | text | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| content_type_id | integer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | django_content_type.id |
| user_id | integer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | auth_user.id |
| action_flag | smallint unsigned | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

2.8. django_content_type

| Campo | Tipo | Pk | NN | U | Referencia |
|-----------|--------------|-------------------------------------|-------------------------------------|-------------------------------------|------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| app_label | varchar(100) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| model | varchar(100) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Grupos únicos:

- (app_label, model)

2.9. django_migrations

| Campo | Tipo | Pk | NN | U | Referencia |
|---------|--------------|-------------------------------------|-------------------------------------|-------------------------------------|------------|
| id | integer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| app | varchar(255) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| name | varchar(255) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| applied | datetime | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

2.10. django_session

| Campo | Tipo | Pk | NN | U | Referencia |
|--------------|-------------|-------------------------------------|-------------------------------------|-------------------------------------|------------|
| session_key | varchar(40) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| session_data | text | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| expire_date | datetime | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Capítulo 3

Diagrama de Clases

3.1. django.contrib.auth.models

| |
|---|
| User |
| username: string(150) first_name: string(30) last_name: string(30) email: email password: hash groups: Group[] user_permissions: Permission[] is_staff: boolean is_active: boolean is_superuser: boolean last_login: datetime date_joined: datetime |
| is_authenticated: boolean is_anonymous: boolean |
| get_username(): string get_full_name(): string get_short_name(): string set_password(raw_password) check_password(raw_password): boolean set_unusable_password() has_usable_password(): boolean get_user_permissions(obj=None): string[] get_group_permissions(obj=None): string[] get_all_permissions(obj=None): string[] has_perm(perm, obj=None): boolean has_perms(perm[], obj=None): boolean has_module_perms(app_label): boolean email_user(subject, message, from_email=None, **kwargs) |
| UserManager: BaseUserManager |
| |
| create_user(username, email=None, password=None, **extra_fields): User create_superuser(username, email=None, password=None, **extra_fields) with_perm(perm, is_active=True, include_superusers=True, backend=None, obj=None): User[] |
| Permission |
| name: string content_type: +django_content_type codename: string |
| |

| Group |
|----------------------------|
| name: string |
| permissions: Permission[] |
| |

Formatos:

- perm: “app_label.permission_codename”

3.2. django.contrib.contenttypes.models

| ContentType |
|--|
| app_label: string |
| model: string |
| name: string |
| get_object_for_this_type(**kwargs): <i>ModelClassObjects</i> |
| model_class(): <i>ModelClass</i> |

| ContentTypeManager |
|--|
| |
| clear_cache() |
| get_for_id(id): ContentType |
| get_for_model(model, for_concrete_model=True): ContentType |
| get_for_models(*models, for_concrete_model=True): dict |
| get_by_natural_key(app_label, model): ContentType |

3.3. django.contrib.auth.base_user

| AbstractBaseUser |
|------------------|
|------------------|

| UserManager |
|-------------|
|-------------|

3.4. Otros

| BaseUserManager |
|---|
| |
| <i>static</i> normalize_email(email): string |
| get_by_natural_key(username): User |
| make_random_password(length=10, allowed_chars= 'abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ23456789'): string |

3.5. zend_django.functional_tests.utils_test

| FunctionalTest: StaticLiveServerTestCase |
|---|
| main_model_name: string = "" base_data_model: model = None duplicar: string = "alfa" actualizar1: string = "beta" actualizar2: string = "beta_002" |
| setUp() tearDown() XPathFind(xpath, multiple=False, base_object = None) Wait2PresenceOf(xpath, seconds=30) t_list(search_text="alfa") t_list_to_crud_pages() t_read_to_crud_pages() t_update_right() |

| URLsTests: SimpleTestCase |
|---|
| model_name: string = "" main_views: views_modelule = None |
| t_url_resolves(url, view) t_list_url_resolves() t_crerate_url_resolves() t_update_url_resolves() t_delete_url_resolves() t_read_url_resolves() |

| ViewsTests: TestCase |
|---|
| <pre> model_name: string = "" duplicar: string = "alfa" actualizar1: string = "beta" actualizar2: string = "beta.002" inexistente: string = "inexistente" idinexistente: int = 99999 main_views: views_module = None campo_base: string = "" base_data_model: model = None objs: data_object = [] </pre> |
| <pre> getData(obj) preSetUp() t_list_get_post(method="get") t_list_post_searching() t_list_post_no_searching() t_list_post_searching_inexistent() t_list_post_no_searching_inexistent() t_read_get_existente(template_file="zend_django/html/form.html") t_read_get_inexistente() t_read_post(id) t_create_get_post(looking_for, method="get", template_file="zend_django/html/form.html") t_create_post_well(data=None) t_create_post_duplicating(looking_for, data=None, template_file="zend_django/html/form.html") t_update_get_post(id, looking_for, method="get", template_file="zend_django/html/form.html") t_update_get_inexistente() t_update_post_well(data=None) t_update_post_duplicating(looking_for, data=None, template_file="zend_django/html/form.html") t_update_post_inexistente_empty() t_update_post_inexistente(data) t_update_post_inexistente_well() t_update_post_inexistente_duplicating() t_delete_get_existente(obj) t_delete_get_inexistente() t_delete_post(id) </pre> |

Capítulo 4

Utilerias HTML

4.1. zend_django.templatetags.html_helpers

4.1.1. Funciones

`get_apps()` : `list`

4.1.2. Inclusion Tags

```
{% tag %}

generate_get_css_apps() : {'apps': list_obj}
generate_get_js_apps() : {'apps': list_obj}
requiere_ui_css(context) : {'apps': ['jquery-ui']} | {}
requiere_ui_js(context) : {'apps': ['jquery-ui.min', 'datepicker-es'], 'req-ui': True} | {}

context.request.META["HTTP_USER_AGENT"]
```

4.2. zend_django.templatetags.op_helpers

4.2.1. CRUDs

- `create`
- `create_f`
- `read`
- `update`
- `delete`
- `list`

4.2.2. Actions

- `save`
- `ok`
- `cancel`
- `send_mail`
- `call`
- `send_whatsapp`
- `reset_password`

4.2.3. Simple Tags

```
{% tag %}

crud_icon(operation): string
crud_label(operation): string
crud_smart_button(operation): string

action_icon(action): string
action_label(action): string
action_smart_button(operation): string
```

4.3. html_struct.html

| | |
|--------------|--|
| Llamada como | zend_django/html/html_struct.html |
| Carga | html_helpers op_helpers parametros_helpers |

```
<!doctype html>

<head>

  <title>{% parametro_de_sistema seccion='SitioGeneral' nombre='site_title' %}</title>

  <link rel="icon" href="{{ MEDIA_URL }}{% parametro_de_sistema seccion='SitioGeneral' nombre='favicon' %}" type="image/png" />

  {% generate_get_css_apps %}
  {% requiere_ui_css %}

  <script type="text/javascript">
    let BASE_URL = '{{ request.get_host }}'
  </script>

</head>

<body>

  {% include "zend_django/menupo/main_menu.html" %}

  {% block extraaftermain %}
  {% endblock %}

  .container

    {% include "zend_django/html/toolbar.html" %}

    <h1>
      {{ titulo | safe }}
      <small class="text-muted">
        {{ titulo_descripcion | safe }}
      </small>
    </h1>

    {% block extrabefore %}
    {% endblock %}

    {% block content %}
    {% endblock %}

    {% block extraafter %}
    {% endblock %}

  {% include "zend_django/html/footer.html" %}

  {% generate_get_js_apps %}
  {% requiere_ui_js %}

  {% if req_chart %}
    <script type="text/javascript" src="{% static 'api/js/chart-272.min.js' %}"></script>
  {% endif %}

  {% if read_only %}
    App.setReadOnlyForm();
  {% endif %}
```

Figura 4.1: html_struct.html

4.4. toolbar.html

```

toolbar = [
{'type': 'rlink',      'label': 'Etiqueta',      'url': 'http://...'},
{'type': 'link',       'label': 'Etiqueta',       'view': 'NombreVista'},
{'type': 'link_pk',    'label': 'Etiqueta',       'view': 'NombreVista', pk: 'Valor'},
{'type': 'link_pk_del', 'label': 'Etiqueta',       'view': 'NombreVista', pk: 'Valor'},
{'type': 'button',     'label': 'Etiqueta',       'onclick': 'CodigoJS'},
{'type': 'search'},
]

```

4.5. form.html

| | |
|--------------|-----------------------------------|
| Llamada como | zend_django/html/form.html |
| Extiende | zend_django/html/html_struct.html |
| Carga | crispy_forms_tags op_helpers |

```

forms = {
    'top': [{ 'title': 'XXXX', 'form': form_object }, ... ],
    'left': [...],
    'right': [...],
    'bottom': [...],
}

```

#main-form[enctype="multipart/form-data"][method="post"]

forms.top

form_obj.title

☐ Select fields to update status

Position
☐ Senior Engineer ok

Company
☐ Tesla Motors ok

Working from
☐ October ▼ 2011 ▼ — Working to Current time
 December ▼ 2012 ▼ ok

forms.left

form_obj.title

☐ Select fields to update status Mark all as OK

☐ Engineering ok

☐ Thinking ok

☐ Working ok

☐ Sleeping ok

☐ Eating ok

☐ Walking ok

forms.right

form_obj.title

☐ Select fields to update status Mark all as OK

☐ Engineering ok

☐ Thinking ok

☐ Working ok

☐ Sleeping ok

☐ Eating ok

☐ Walking ok

forms.bottom

form_obj.title

☐ Select fields to update status

Position
☐ Senior Engineer ok

Company
☐ Tesla Motors ok

Working from
☐ October ▼ 2011 ▼ — Working to Current time
 December ▼ 2012 ▼ ok

{% action_icon 'save' %} {% action_label 'save' %}

Figura 4.2: forms.html