
latest

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build passing

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A Django reusable app providing the ability for admin users to create their own forms within the admin interface, drawing from a range of field widgets such as regular text fields, drop-down lists and file uploads. Options are also provided for controlling who gets sent email notifications when a form is submitted. All form entries are made available in the admin via filterable reporting with CSV/XLS export.

Form builder:

The screenshot displays the Django Form Builder interface. The top section is titled "Email" and includes a "Send email" checkbox, which is checked. Below this, there are input fields for "From address" (steve@jupo.org), "Send copies to" (steve@jupo.org), and "Subject" (steve@jupo.org). A "Message" text area contains the text "Yeah you know me".

The bottom section is titled "Fields (Show)" and contains a table of form fields. The table has columns for Label, Type, Required, Visible, Choices, Default value, Placeholder Text, Help text, Order, and Delete?.

Label	Type	Required	Visible	Choices	Default value	Placeholder Text	Help text	Order	Delete?
Name	Single line text	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					0	<input type="checkbox"/>
Email	Email	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					1	<input type="checkbox"/>
Favourite colour	Radio buttons	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Red, Blue, Green				2	<input type="checkbox"/>
Date of birth	Date of birth	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		{{ request.user.username }}			3	<input type="checkbox"/>
Down with O.P.P	My cool checkbox	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					4	<input type="checkbox"/>
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input type="checkbox"/>
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input type="checkbox"/>
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input type="checkbox"/>

At the bottom of the fields table, there is a "Delete" button and a "Save and add another" button. At the bottom right of the interface, there are buttons for "Save and continue editing" and "Save".

Data reporting:

View Entries

Field	Include	Filter by
Name:	<input checked="" type="checkbox"/>	Contains : <input type="text"/>
Email:	<input checked="" type="checkbox"/>	Doesn't contain : <input type="text"/>
Username:	<input checked="" type="checkbox"/>	Nothing
Favourite colour:	<input checked="" type="checkbox"/>	Equals any : <input checked="" type="checkbox"/> Red <input checked="" type="checkbox"/> Blue <input type="checkbox"/> Green
Date of birth:	<input checked="" type="checkbox"/>	Nothing
Down with O.P.P.:	<input checked="" type="checkbox"/>	Nothing
Date/time:	<input checked="" type="checkbox"/>	Is between : <input type="text"/> and: <input type="text"/>
All	<input checked="" type="checkbox"/>	

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Entries (5)

<input type="checkbox"/>	Name	Email	Username	Favourite colour	Date of birth	Down with O.P.P.	Date/time
<input type="checkbox"/>	One more time sam	steve@jupo.org	steve	Red	2013-11-01	True	March 13, 2014, 3:48 p.m.
<input type="checkbox"/>	Steve again	steve@jupo.org	steve	Red	2013-11-01	True	March 13, 2014, 3:48 p.m.
<input type="checkbox"/>	Steve	steve@jupo.org	steve	Blue	2013-11-01	True	March 13, 2014, 3:48 p.m.
<input type="checkbox"/>	Steve	steve@jupo.org	steve	Blue	2013-11-01	True	March 13, 2014, 3:47 p.m.
<input type="checkbox"/>	Steve	steve@jupo.org	steve	Blue	2013-11-01	True	March 13, 2014, 3:47 p.m.

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[Delete selected](#)

CHAPTER 1

HTML5 Features

The following HTML5 form features are supported.

- placeholder attributes
- required attributes
- email fields
- date fields
- datetime fields
- number fields
- url fields

CHAPTER 2

Installation

The easiest way to install `django-forms-builder` is directly from PyPi using `pip` by running the command below:

```
$ pip install -U django-forms-builder
```

Otherwise you can download `django-forms-builder` and install it directly from source:

```
$ python setup.py install
```

Once installed you can configure your project to use `django-forms-builder` with the following steps.

Add `forms_builder.forms` to `INSTALLED_APPS` in your project's settings module:

```
INSTALLED_APPS = (  
    # other apps  
    'forms_builder.forms',  
)
```

If you haven't already, ensure `django.core.context_processors.request` is in the `TEMPLATE_CONTEXT_PROCESSORS` setting in your project's settings module:

```
TEMPLATE_CONTEXT_PROCESSORS = (  
    # other context processors  
    "django.core.context_processors.request",  
    # Django 1.6 also needs:  
    'django.contrib.auth.context_processors.auth',  
)
```

Then add `forms_builder.forms.urls` to your project's `urls` module:

```
from django.conf.urls.defaults import patterns, include, url  
import forms_builder.forms.urls # add this import  
  
from django.contrib import admin  
admin.autodiscover()
```

```
urlpatterns = patterns('',
    # other urlpatterns
    url(r'^admin/', include(admin.site.urls)),
    url(r'^forms/', include(forms_builder.forms.urls)),
)
```

Finally, sync your database:

```
$ python manage.py syncdb
```

As of version 0.5, django-forms-builder provides [South](#) migrations. If you use south in your project, you'll also need to run migrations:

```
$ python manage.py migrate forms
```

Once installed and configured for your project just go to the admin page for your project and you will see a new Forms section. In this you can create and edit forms. Forms are then each viewable with their own URLs. A template tag `render_built_form` is also available for displaying forms outside of the main form view provided. It will display a form when given an argument in one of the following formats, where `form_instance` is an instance of the `Form` model:

```
{% load forms_builder_tags %}

{% render_built_form form_instance %}
{% render_built_form form=form_instance %}
{% render_built_form id=form_instance.id %}
{% render_built_form slug=form_instance.slug %}
```

This allows forms to be displayed without having a form instance, using a form's slug or ID, which could be hard-coded in a template, or stored in another model instance.

CHAPTER 4

File Uploads

It's possible for admin users to create forms that allow file uploads which can be accessed via a download URL for each file that is provided in the CSV export. By default these uploaded files are stored in an obscured location under your project's `MEDIA_ROOT` directory but ideally they should be stored somewhere inaccessible to the public. To set the location where files are stored to be somewhere outside of your project's `MEDIA_ROOT` directory you just need to define the `FORMS_BUILDER_UPLOAD_ROOT` setting in your project's `settings` module. Its value should be an absolute path on the web server that isn't accessible to the public.

The following settings can be defined in your project's `settings` module.

- `FORMS_BUILDER_FIELD_MAX_LENGTH` - Maximum allowed length for field values. Defaults to 2000
- `FORMS_BUILDER_LABEL_MAX_LENGTH` - Maximum allowed length for field labels. Defaults to 20
- `FORMS_BUILDER_EXTRA_FIELDS` - Sequence of custom fields that will be added to the form field types. Defaults to `()`
- `FORMS_BUILDER_UPLOAD_ROOT` - The absolute path where files will be uploaded to. Defaults to `None`
- `FORMS_BUILDER_USE_HTML5` - Boolean controlling whether HTML5 form fields are used. Defaults to `True`
- `FORMS_BUILDER_USE_SITES` - Boolean controlling whether forms are associated to Django's Sites framework. Defaults to `"django.contrib.sites"` in `settings.INSTALLED_APPS`
- `FORMS_BUILDER_EDITABLE_SLUGS` - Boolean controlling whether form slugs are editable in the admin. Defaults to `False`
- `FORMS_BUILDER_CHOICES_QUOTE` - Char to start a quoted choice with. Defaults to the backtick char: `'`
- `FORMS_BUILDER_CHOICES_UNQUOTE` - Char to end a quoted choice with. Defaults to the backtick char: `'`
- `FORMS_BUILDER_CSV_DELIMITER` - Char to use as a field delimiter when exporting form responses as CSV. Defaults to a comma: `,`
- `FORMS_BUILDER_EMAIL_FAIL_SILENTLY` - Bool used for Django's `fail_silently` argument when sending email. Defaults to `settings.DEBUG`.

Custom Fields and Widgets

You can also add your own custom fields or widgets to the choices of fields available for a form. Simply define a sequence for the `FORMS_BUILDER_EXTRA_FIELDS` setting in your project's `settings` module, where each item in the sequence is a custom field that will be available.

Each field in the sequence should be a three-item sequence containing an ID, a dotted import path for the field class, and a field name, for each custom field type. The ID is simply a numeric constant for the field, but cannot be a value already used, so choose a high number such as 100 or greater to avoid conflicts:

```
FORMS_BUILDER_EXTRA_FIELDS = (  
    (100, "django.forms.BooleanField", "My cool checkbox"),  
    (101, "my_module.MyCustomField", "Another field"),  
)
```

You can also define custom widget classes for any of the existing or custom form fields via the `FORMS_BUILDER_EXTRA_WIDGETS` setting. Each field in the sequence should be a two-item sequence containing the same ID referred to above for the form field class, and a dotted import path for the widget class:

```
FORMS_BUILDER_EXTRA_WIDGETS = (  
    (100, "my_module.MyCoolWidget"),  
    (101, "my_other_module.AnotherWidget"),  
)
```

Note that using the `FORMS_BUILDER_EXTRA_WIDGETS` setting to define custom widgets for field classes of your own is somewhat redundant, since you could simply define the widgets on the field classes directly in their code.

Email Templates

The `django-email-extras` package is used to send multipart email notifications using Django's templating system for constructing the emails, to users submitting forms, and any recipients specified when creating a form via Django's admin.

Templates for HTML and text versions of the email can be found in the `templates/email_extras` directory. This allows you to customize the look and feel of emails that are sent to form submitters. Along with each of the `form_response` email templates which are used to email the form submitter, you'll also find corresponding `form_response_copies` templates, that extend the former set - these are used as the templates for emailing any extra recipients specified for the form in the admin interface. By default they simply extend the `form_response` templates, but you can modify them should you need to customize the emails sent to any extra recipients.

Note: With `django-email-extras` installed, it's also possible to configure [PGP](#) encrypted emails to be sent to staff members, allowing forms to be built for capturing sensitive information. Consult the [django-email-extras](#) documentation for more info.

Two signals are provided for hooking into different states of the form submission process.

- `form_invalid(sender=request, form=form)` - Sent when the form is submitted with invalid data.
- `form_valid(sender=request, form=form, entry=entry)` - Sent when the form is submitted with valid data.

For each signal the sender argument is the current request. Both signals receive a `form` argument is given which is the `FormForForm` instance, a `ModelForm` for the `FormEntry` model. The `form_valid` signal also receives a `entry` argument, which is the `FormEntry` model instance created.

Some examples of using the signals would be to monitor how users are causing validation errors with the form, or a pipeline of events to occur on successful form submissions. Suppose we wanted to store a logged in user's username against each form when submitted, given a form containing a field with the label `Username` with its `field_type` set to `Hidden`:

```
from django.dispatch import receiver
from forms_builder.forms.signals import form_valid

@receiver(form_valid)
def set_username(sender=None, form=None, entry=None, **kwargs):
    request = sender
    if request.user.is_authenticated():
        field = entry.form.fields.get(label="Username")
        field_entry, _ = entry.fields.get_or_create(field_id=field.id)
        field_entry.value = request.user.username
        field_entry.save()
```

Dynamic Field Defaults

As of version 0.6, you can use Django template code for default field values. For example you could enter `{{ request.user.username }}` and the field will be pre-populated with a user's username if they're authenticated.

CHAPTER 10

XLS Export

By default, `django-forms-builder` provides export of form entries via CSV file. You can also enable export via XLS file (Microsoft Excel) by installing the `xlwt` package:

```
$ pip install xlwt
```