
django-bootstrap-datepicker-plus **Documentation**

Release 3.0.5

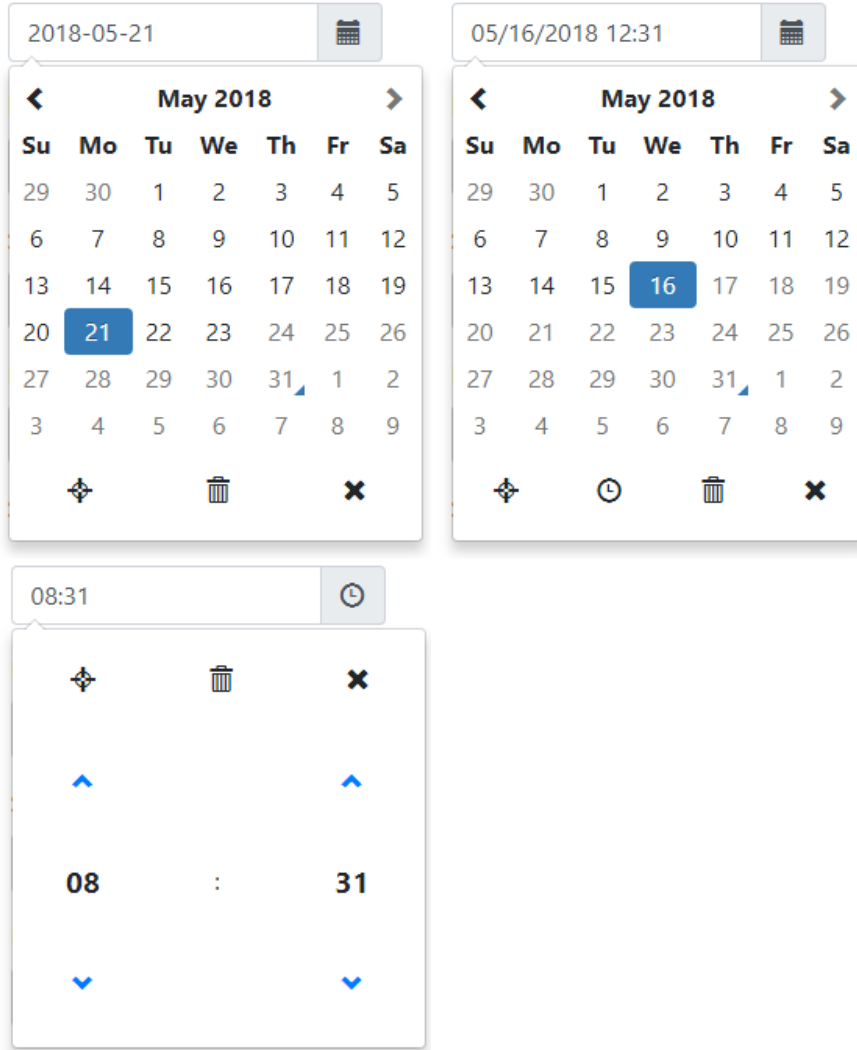
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Contents:

1	Demo	3
1.1	Getting Started	3
1.2	Quick Walkthrough Tutorial	4
1.3	Usage	7
1.4	Template Customizing	10
1.5	TroubleShooting	11
1.6	Contributing	13
1.7	License	13
1.8	Acknowledgments	13

This django widget contains Bootstrap 3 and Bootstrap 4 Date-Picker, Time-Picker, DateTime-Picker, Month-Picker and Year-Picker input with date-range-picker functionality for django version 2.1, 2.0, 1.11, 1.10 and 1.8. The widget implements `bootstrap-datetimepicker v4` to show bootstrap-datepicker in django model forms and custom forms which can be configured easily for date-range selection.



- With Bootstrap 3.
- With Bootstrap 4.

1.1 Getting Started

1.1.1 Prerequisites

- Python \geq 3.3
- Django \geq 1.8
- Bootstrap \geq 3
- jquery \geq 1.7.1

1.1.2 Installing

Install the widget via pip

```
pip install django-bootstrap-datepicker-plus
```

Add `bootstrap_datepicker_plus` to the list of `INSTALLED_APPS` in your `settings.py` file.

```
INSTALLED_APPS = [  
    # Add the following  
    'bootstrap_datepicker_plus',  
]
```

Warning: This installation instruction assumes you have jQuery and Bootstrap JS/CSS files present in your template and you are using `form.media` in your django template. If not you should checkout our [configuration instructions](#) which covers almost everything you need to get the widget running.

1.2 Quick Walkthrough Tutorial

This tutorial will take off where django official tutorial [Writing your first Django app, part 4](#) left off. If you don't have the project you can clone the following repository and checkout to completion of tutorial 04.

```
git clone https://github.com/monim67/django-polls
cd django-polls
git checkout d2.1t4
```

The Question model has a datetime field. We are going to create a page to add new poll questions and a page to edit them with a date-time-picker calendar on the datetime field. We are going to use Bootstrap 4 here, if you are using Bootstrap 3 just replace the 4's with 3's in the codes and instructions below. Install following packages:

```
pip install django-bootstrap4
pip install django-bootstrap-datepicker-plus
```

Add these packages to the list of `INSTALLED_APPS` as you did here on [Tutorial 02](#).

```
# file: mysite/settings.py
INSTALLED_APPS = [
    'polls.apps.PollsConfig',
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    "bootstrap4",
    "bootstrap-datepicker_plus",
]
```

1.2.1 CreateView for Question model

Add a CreateView for Question model. The `get_form` method is used to specify widgets on the form fields.

```
# file: polls/views.py
from django.http import HttpResponseRedirect
from django.shortcuts import get_object_or_404, render
from django.urls import reverse
from django.views import generic

from bootstrap_datepicker_plus import DateTimePickerInput

from .models import Choice, Question

class CreateView(generic.edit.CreateView):
    model = Question
```

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```
fields = ['question_text', 'pub_date']
def get_form(self):
    form = super().get_form()
    form.fields['pub_date'].widget = DateTimePickerInput()
    return form
```

Leave other classes unchanged

Create a template named `question_form.html` in your app to render the form. If you use a different name you have to set `template_name` property of `CreateView` class in your `views.py` file above.

```
<!-- file: polls/templates/polls/question_form.html -->
{% load bootstrap4 %}
{% bootstrap_css %}
{% bootstrap_javascript jquery='full' %}
{{ form.media }}

<form method="post">{% csrf_token %}
  {% bootstrap_form form %}
  <input type="submit" value="Save">
</form>
```

Add a `get_absolute_url` method to your `Question` model.

```
# file: polls/models.py
import datetime

from django.db import models
from django.urls import reverse
from django.utils import timezone

class Question(models.Model):
    question_text = models.CharField(max_length=200)
    pub_date = models.DateTimeField('date published')

    def __str__(self):
        return self.question_text

    def was_published_recently(self):
        return self.pub_date >= timezone.now() - datetime.timedelta(days=1)

    def get_absolute_url(self):
        return reverse('polls:detail', kwargs={'pk': self.pk})
```

Add an `urlpatterns` for creating new poll question.

```
# file: polls/urls.py
from django.urls import path

from . import views

app_name = 'polls'
urlpatterns = [
    path('', views.IndexView.as_view(), name='index'),
    path('create', views.CreateView.as_view(), name='create'),
```

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```

    path('<int:pk>/', views.DetailView.as_view(), name='detail'),
    path('<int:pk>/results/', views.ResultsView.as_view(), name='results'),
    path('<int:question_id>/vote/', views.vote, name='vote'),
]

```

Now run the development server and visit <http://localhost:8000/polls/create>, if everything works fine you can wrap up your template in proper HTML.

```

<!-- file: polls/templates/polls/question_form.html -->
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta http-equiv="X-UA-Compatible" content="ie=edge">
  <title>Document</title>
  {% load bootstrap4 %}
  {% bootstrap_css %}
  {% bootstrap_javascript jquery='full' %}
  {{ form.media }}
</head>
<body>
  <div class="container">
    <div class="col-md-3">
      <form method="post">{% csrf_token %}
        {% bootstrap_form form %}
        {% buttons %}
          <button type="submit" class="btn btn-primary">Save</button>
        {% endbuttons %}
      </form>
    </div>
  </div>
</body>
</html>

```

1.2.2 UpdateView for Question model

We can now add a page to update a poll question. First we add an UpdateView to our views.

```

# file: add these to polls/views.py
class UpdateView(generic.edit.UpdateView):
    model = Question
    fields = ['question_text', 'pub_date']
    def get_form(self):
        form = super().get_form()
        form.fields['pub_date'].widget = DateTimePickerInput()
        return form

```

Then add a urlpattern to access the question update page.

```

# file: polls/urls.py
from django.urls import path

from . import views

```

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```
app_name = 'polls'
urlpatterns = [
    path('', views.IndexView.as_view(), name='index'),
    path('create', views.CreateView.as_view(), name='create'),
    path('<int:pk>', views.DetailView.as_view(), name='detail'),
    path('<int:pk>/update', views.UpdateView.as_view(), name='update'),
    path('<int:pk>/results/', views.ResultsView.as_view(), name='results'),
    path('<int:question_id>/vote/', views.vote, name='vote'),
]
```

That's it, run the development server and visit <http://localhost:8000/polls/1/update>, if everything works fine you can checkout usage in custom form and model form in Usage page of the docs.

1.3 Usage

1.3.1 Usage in Generic View

```
# File: views.py
from bootstrap_datepicker_plus import DateTimePickerInput
from django.views import generic
from .models import Question

class CreateView(generic.edit.CreateView):
    model = Question
    fields = ['question_text', 'pub_date']
    def get_form(self):
        form = super().get_form()
        form.fields['pub_date'].widget = DateTimePickerInput()
        return form
```

1.3.2 Custom Form usage

```
# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput
from .models import Event
from django import forms

class ToDoForm(forms.Form):
    todo = forms.CharField(
        widget=forms.TextInput(attrs={"class": "form-control"})
    )
    date = forms.DateField(
        widget=DatePickerInput(format='%m/%d/%Y')
    )
```

1.3.3 Model Form usage

```
# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput
```

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```

from .models import Event
from django import forms

class EventForm(forms.ModelForm):
    class Meta:
        model = Event
        fields = ['name', 'start_date', 'end_date']
        widgets = {
            'start_date': DatePickerInput(), # default date-format %m/%d/%Y will be_
↪used
            'end_date': DatePickerInput(format='%Y-%m-%d'), # specify date-format
        }

```

1.3.4 Types of DatePickers

The widget contains all types of date-picker you may ever need.

```

# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput, TimePickerInput, ↪
↪DateTimePickerInput, MonthPickerInput, YearPickerInput
from .models import Event
from django import forms

class EventForm(forms.ModelForm):
    class Meta:
        model = Event
        fields = ['start_date', 'start_time', 'start_datetime', 'start_month',
↪'start_year']
        widgets = {
            'start_date': DatePickerInput(),
            'start_time': TimePickerInput(),
            'start_datetime': DateTimePickerInput(),
            'start_month': MonthPickerInput(),
            'start_year': YearPickerInput(),
        }

```

1.3.5 Implement date-range-picker

DatePickers can be linked to select a date-range or time-range.

```

# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput, TimePickerInput
from .models import Event
from django import forms

class EventForm(forms.ModelForm):
    class Meta:
        model = Event
        fields = ['name', 'start_date', 'end_date', 'start_time', 'end_time']
        widgets = {
            'start_date': DatePickerInput().start_of('event days'),
            'end_date': DatePickerInput().end_of('event days'),
            'start_time': TimePickerInput().start_of('party time'),

```

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```

        'end_time': TimePickerInput().end_of('party time'),
    }

```

1.3.6 Customize Datepicker Options

The DatePicker can be customized by passing options to it. The options will be passed to the JavaScript datepicker instance, and are documented and demonstrated in [Bootstrap Datepicker Options Reference](#).

```

# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput
from .models import Event
from django import forms

class EventForm(forms.ModelForm):
    class Meta:
        model = Event
        fields = ['name', 'start_date', 'end_date']
        widgets = {
            'start_date': DatePickerInput(format='%m/%d%Y'), # python date-time_
↪format
            'end_date': DatePickerInput(
                options={
                    "format": "MM/DD/YYYY", # moment date-time format
                    "showClose": True,
                    "showClear": True,
                    "showTodayButton": True,
                }
            ),
        }

```

Note: You can specify the date-time format by passing a [python date-time format](#) as format parameter (see start_date in the example), or by passing a [moment date-time format](#) as an option (see end_date in the example). If both are specified then the moment format in options will take precedence.

1.3.7 Customize DatePicker Format

In order to use arbitrary formats you must specify the pattern to the field's `input_formats` and the widget's format.

```

# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput
from .models import Event
from django import forms

class ToDoForm(forms.Form):
    todo = forms.CharField(
        widget=forms.TextInput(attrs={"class": "form-control"})
    )
    date = forms.DateField(
        input_formats=['%d/%m/%Y'],
        widget=DatePickerInput(format='%d/%m/%Y')
    )

```

1.3.8 Customize the Language

The DatePicker language can be customized by passing a `locale` option to `datepicker` input. See [moment.js locales](#) for valid locales.

```
# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput
from .models import Event
from django import forms

class EventForm(forms.ModelForm):
    class Meta:
        model = Event
        fields = ['name', 'pub_date']
        widgets = {
            'pub_date': DatePickerInput(
                options={
                    "format": "MM/DD/YYYY",
                    "locale": "bn",
                }
            ),
        }
```

1.4 Template Customizing

The calendar is not yet available for customizing, but the input field template can be customized. You can use a custom template for the input field to render.

```
# File: forms.py
from bootstrap_datepicker_plus import DatePickerInput
from django import forms

class MyDatePickerInput(DatePickerInput):
    template_name = 'my_app/date-picker.html'

class ToDoForm(forms.Form):
    date = forms.DateField(
        widget=MyDatePickerInput(format='%m/%d/%Y')
    )
```

Now you have to create a HTML template for date-picker input.

```
<!-- File: my_app/templates/my_app/date-picker.html -->

<h5>This is a customized date-picker</h5>
<div class="input-group date my-custom-class">
    {% include "bootstrap_datepicker_plus/input.html" %}
    <div class="input-group-addon input-group-append">
        <div class="input-group-text"><i class="glyphicon glyphicon-calendar"></i></div>
    </div>
</div>
```

You can also create a template for `TimePickerInput` and create a custom time-picker input.

```

<!-- File: my_app/templates/my_app/time-picker.html -->

<h5>This is a customized time-picker</h5>
<div class="input-group date my-custom-class">
  {% include "bootstrap-datepicker_plus/input.html" %}
  <div class="input-group-addon input-group-append">
    <div class="input-group-text"><i class="glyphicon glyphicon-time"></i></div>
  </div>
</div>

```

1.5 Troubleshooting

If the date-picker calendar does not show up, possibility is you missed something of the installation procedure. Check out the following errors and you might find your solution.

1.5.1 Errors displayed on browser screen

Error: TemplateSyntaxError: bootstrap3/4 is not a registered tag library.

This means you did not install django-bootstrap3 and add it to the list of INSTALLED_APPS. Checkout our [configuration instructions](#) to see how to do it.

Error: TemplateDoesNotExist bootstrap-datepicker_plus/date-picker.html

This means you did not install django-bootstrap-datepicker-plus and add it to the list of INSTALLED_APPS. Checkout our [configuration instructions](#) to see how to do it.

Error: TemplateSyntaxError: Invalid block tag 'bootstrap_form'.

You have not loaded bootstrap3/bootstrap4 tag. Checkout our [configuration instructions](#) to see how to do it.

1.5.2 Errors displayed on browser console

Sometimes the page loads just fine, but errors are logged into browser's developer console.

Error: Uncaught TypeError: Cannot read property 'fn' of undefined

Error: Uncaught Error: Bootstrap's JavaScript requires jQuery

Error: Uncaught ReferenceError: jQuery is not defined

Error: Uncaught bootstrap-datetimepicker requires jQuery to be loaded first

The above errors are listed in the console if you forget to add jQuery to your template. Bootstrap's JavaScript should be preceded by jQuery, otherwise Bootstrap will throw an error. Checkout our [configuration instructions](#) to see various options to do it.

Error: Uncaught TypeError: Cannot read property 'Constructor' of undefined

You forgot to add bootstrap JavaScript file to your template, make sure you have both Bootstrap JavaScript and CSS files to your included in your template. Checkout our [configuration instructions](#) to see various options to do it.

1.5.3 Fix 404 (Not Found) errors

Error: GET http://.../datepicker-widget.js net::ERR_ABORTED 404 (Not Found)

Error: GET http://.../datepicker-widget.css net::ERR_ABORTED 404 (Not Found)

In some production environment you need to collect static JS/CSS resources from all packages to a single location specified as `STATIC_ROOT` in `settings.py` file. Check your hosting provider manual to see how to do it correctly.

Otherwise if your hosting interface provides access to console, log in to your server console and run the following command and then reload the server from your hosting interface.

```
python3 manage.py collectstatic
```

Error: You're using the staticfiles app without having set the `STATIC_ROOT` setting to a filesystem path

If you encounter above error then you don't have `STATIC_ROOT` directory set. Check your hosting provider instruction manual to identify the directory it serves static files from, generally it's the `static` directory in your project root. If so add the following line at the bottom of your `settings.py` file.

```
STATIC_ROOT = os.path.join(BASE_DIR, "static")
```

Now you can execute `collectstatic` command and reload the server from your hosting interface.

1.5.4 No errors anywhere, but the calendar does not show up!

You forgot to add `{{ form.media }}` to your template. Checkout our [configuration instructions](#) to learn more about this issue.

1.5.5 My error is not listed here

Please [create an issue](#) on the project's GitHub repository providing as much information you can.

1.6 Contributing

- [CONTRIBUTING.md](#).
- [CODE_OF_CONDUCT.md](#).

1.7 License

This project is licensed under Apache License 2.0 - see the [LICENSE](#) file for details.

1.8 Acknowledgments

This project implements [Eonasdan/bootstrap-datetimepicker](#) to display date-pickers. The project was initially forked from [pbucher/django-bootstrap-datepicker](#).