django-paste

Release 1.1.3

Aristotelis Mikropoulos

Nov 13, 2020

CONTENTS:

1 Pluggable, configurable, pastebin HTTP REST API 1

Index 7

CHAPTER

ONE

PLUGGABLE, CONFIGURABLE, PASTEBIN HTTP REST API

django-paste is a simple Django pluggable app of a code pasting and highlighting HTTP REST API, written using Django REST framework. It supports the CRUD operations on source code snippets and uses any existing user authentication system. Syntax highlighting is powered by Pygments.

1.1 Installation

The following Python versions are supported:

- CPython: 3.6, 3.7, 3.8, 3.9
- PyPy: 3.6

Django:

- 2.0, 2.1, 2.2
- 3.0, 3.1
- Install via pip:

```
$ pip install django-paste
```

- Add it to your `INSTALLED_APPS`:

```
INSTALLED_APPS = [
    # ...
    'paste.apps.PasteConfig',
]
```

- Register the app's URLs under a path of your choice:

```
urlpatterns = [
    # ...
    path('some-path/', include('paste.urls')),
]
```

  where `'some-path/'` could be any URL.

- Optionally, configure the app settings.
- Generate and run the database migrations:

```
$ python manage.py makemigrations paste
$ python manage.py migrate
```

1.2 API

1.2.1 Endpoints

/
Snippet list

GET List viewable snippets.

POST Create new snippet.

/{snippet-id}/
Snippet detail

GET View queried snippet.

PUT Update queried snippet.

PATCH Partially update queried snippet.

DELETE Delete queried snippet.

/user/{user-id}/
User snippet list

GET List queried user's viewable snippets.

/{snippet-id}/highlight/
Snippet highlight

GET View queried snippet's highlighted content, as HTML. If `full` exists as a query parameter, get a full HTML document.

1.2.2 Content Types

The API can parse data of the following content types:

- application/json
- application/x-www-form-urlencoded
- multipart/form-data

It can render its responses in the following formats:

- application/json
- text/html

A client can request the response in a specific format either by sending an `Accept` header, or by appending `.json` or `.api` to the URL, for JSON and HTML content, respectively.

1.3 Fields

The following fields of snippets have a value automatically generated for them and hence clients are not supposed to explicitly provide them:

- *id*
- *created*
- *updated*
- *owner*

The rest of the fields are optional, except for *content*:

- *content*
- *language*
- *style*
- *line_numbers*
- *embed_title*
- *private*

In more detail:

id

Type number

Read only yes

The snippet's primary key in the database.

content

Type string

Required yes

The source code of the snippet.

language

Type string

The programming language of the snippet. Must be a valid Pygments lexer name.

style

Type string

The style the snippet should be highlighted with. Must be a valid Pygments style name.

line_numbers

Type boolean

Default *DEFAULT_LINE_NUMBERS*

Whether line numbers should be shown in the snippet's highlight view.

embed_title

Type boolean

Default *DEFAULT_EMBED_TITLE*

Whether the title of the snippet should be included in its full highlight view.

private

Type boolean

Default *DEFAULT_PRIVATE*

Whether the snippet should be only viewable by its owner and staff users.

created

Type string

Read only yes

The datetime of the snippet's creation.

updated

Type string

Read only yes

The datetime of the snippet's last modification.

owner

Type number / null

Read only yes

The primary key in the database of the user who created the snippet. If that user was unauthenticated, this field is null.

1.4 Settings

Note: Every time you change settings related to the database, you should then generate and run database migrations.

All the settings of *django-admin* have default values, which can get overriden. This is done by defining a `PASTE` dict in your Django project's settings file, whith any of the following keys:

DEFAULT_EMBED_TITLE

Type `bool`

Default `True`

Whether the title of a snippet should be included in its full highlight view, in case the relative field is not set for it.

DEFAULT_LANGUAGE

Type `str`

Default `'text'`

The Pygments lexer name (programming language) used for the highlighting of a snippet, in case the relative field is not set for it, and the *GUESS_LEXER* setting is `False`.

DEFAULT_LINE_NUMBERS

Type `bool`

Default `True`

Whether line numbers should be shown in a snippet's highlight view, in case the relative field is not set for it.

DEFAULT_PRIVATE

Type `bool`

Default `False`

Whether a snippet should be only viewable by its owner and staff users, in case the relative field is not set for it.

DEFAULT_STYLE

Type `str`

Default `'default'`

The Pygments style for the highlighting of a snippet, in case the relative field is not set for it.

FORBID_ANONYMOUS

Type `bool`

Default `False`

Whether to forbid any API access to unauthenticated users.

FORBID_ANONYMOUS_CREATE

Type `bool`

Default `False`

Whether to forbid snippet creation to unauthenticated users.

FORBID_ANONYMOUS_LIST

Type `bool`

Default `False`

Whether to forbid snippet listing to unauthenticated users.

FORBID_LIST

Type `bool`

Default `False`

Whether to forbid snippet listing to non-staff users.

GUESS_LEXER

Type `bool`

Default `True`

Whether to let Pygments guess a lexer for the highlighting of a snippet, in case the `language` field is not set for it. If this setting is `False` and a language is not set for a snippet, the *DEFAULT_LANGUAGE* setting is considered for its highlighting.

TITLE_MAX_LENGTH

Type `int`

Default `100`

The maximum character length for the `title` field of snippets.

INDEX

Symbols

/
    configuration value, 2
/{snippet-id}/
    configuration value, 2
/{snippet-id}/highlight/
    configuration value, 2
/user/{user-id}/
    configuration value, 2

C

configuration value
    /, 2
    /{snippet-id}/, 2
    /{snippet-id}/highlight/, 2
    /user/{user-id}/, 2
    content, 3
    created, 4
    DEFAULT_EMBED_TITLE, 4
    DEFAULT_LANGUAGE, 4
    DEFAULT_LINE_NUMBERS, 4
    DEFAULT_PRIVATE, 5
    DEFAULT_STYLE, 5
    embed_title, 3
    FORBID_ANONYMOUS, 5
    FORBID_ANONYMOUS_CREATE, 5
    FORBID_ANONYMOUS_LIST, 5
    FORBID_LIST, 5
    GUESS_LEXER, 5
    id, 3
    language, 3
    line_numbers, 3
    owner, 4
    private, 4
    style, 3
    TITLE_MAX_LENGTH, 5
    updated, 4
content
    configuration value, 3
created
    configuration value, 4

D

DEFAULT_EMBED_TITLE
    configuration value, 4
DEFAULT_LANGUAGE
    configuration value, 4
DEFAULT_LINE_NUMBERS
    configuration value, 4
DEFAULT_PRIVATE
    configuration value, 5
DEFAULT_STYLE
    configuration value, 5

E

embed_title
    configuration value, 3

F

FORBID_ANONYMOUS
    configuration value, 5
FORBID_ANONYMOUS_CREATE
    configuration value, 5
FORBID_ANONYMOUS_LIST
    configuration value, 5
FORBID_LIST
    configuration value, 5

G

GUESS_LEXER
    configuration value, 5

I

id
    configuration value, 3

L

language
    configuration value, 3
line_numbers
    configuration value, 3

O

owner

configuration value, 4

P

private
configuration value, 4

S

style
configuration value, 3

T

TITLE_MAX_LENGTH
configuration value, 5

U

updated
configuration value, 4