

# **Documentation with OpenAPI**

**Django Development II**

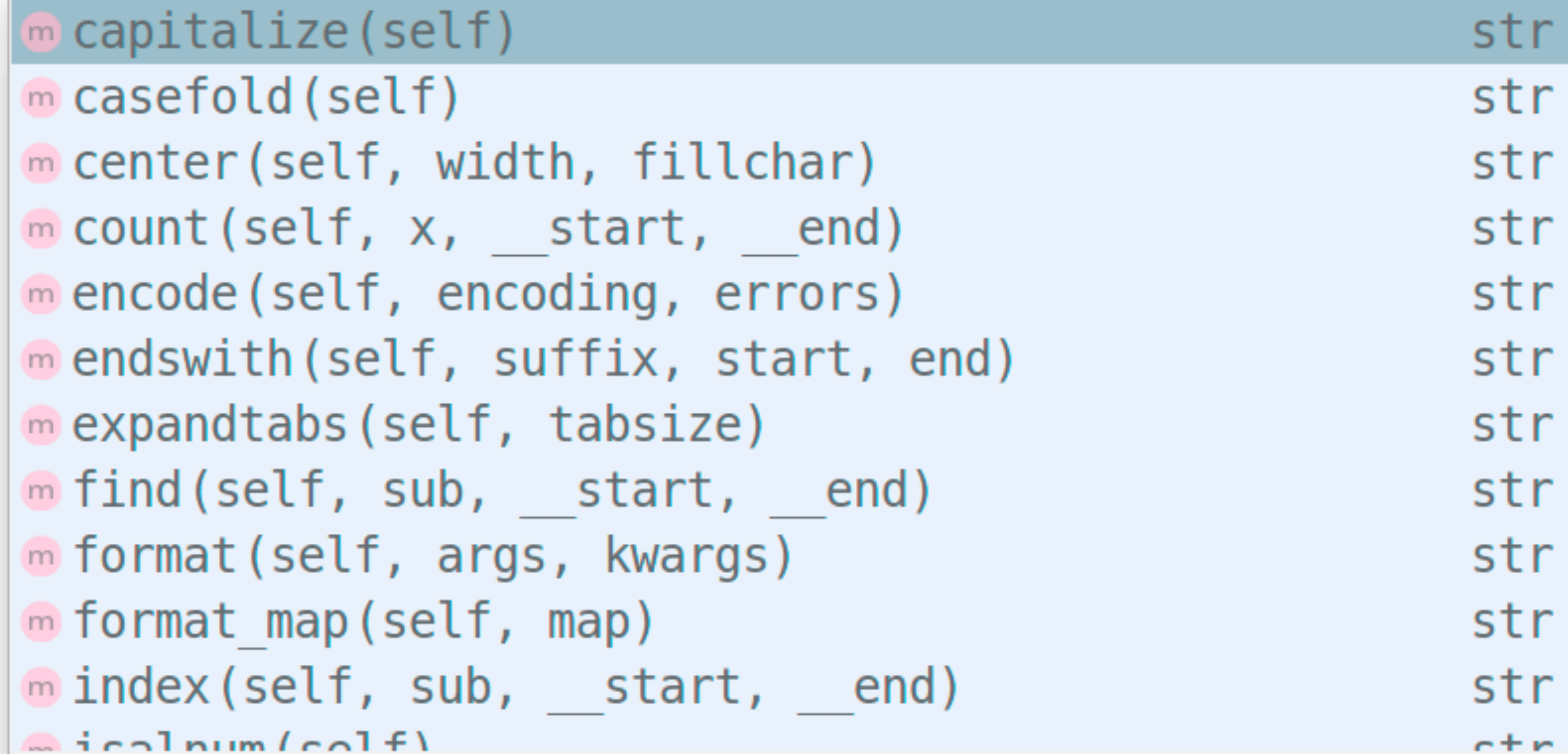
**Azimjon Pulatov | PDP Online**

# Documenting Python Code

```
1  import math
2
3
4  class SimpleEquation:
5      def demo(self, a, b, c):
6          """
7
8              :param int a: quadratic coefficient
9              :param int b: linear coefficient
10             :param c: free term
11             :type c: int
12             """
13             d = math.sqrt(abs(b ** 2 - 4 * a * c))
14             root1 = (-b + d) / (2 * a)
15             root2 = (-b - d) / (2 * a)
16             print(root1, root2)
17
18
19  SimpleEquation().demo(3, 2, 1)
```

# Documenting With Type Hinting

```
def headline(text: str, align: bool = True):  
    if align:  
        return f"{text}."
```



m capitalize(self)	str
m casefold(self)	str
m center(self, width, fillchar)	str
m count(self, x, __start, __end)	str
m encode(self, encoding, errors)	str
m endswith(self, suffix, start, end)	str
m expandtabs(self, tabsize)	str
m find(self, sub, __start, __end)	str
m format(self, args, kwargs)	str
m format_map(self, map)	str
m index(self, sub, __start, __end)	str
m isalnum(self)	str

Press Ctrl+. to choose the selected (or first) suggestion and insert a dot afterwards





# Why Documentation?






# API Contracts



# Swagger OpenAPI Docs



Explore

Swagger Petstore 1.0.0

[ Base url: petstore.swagger.io/v2]  
<http://petstore.swagger.io/v2/swagger.json>

This is a sample server Petstore server. You can find out more about Swagger at <http://swagger.io> or on [irc.freenode.net](https://www.freemove.net), #swagger. For this sample, you can use the api key `special-key` to test the authorization filters.

[Terms of service](#)  
[Contact the developer](#)  
[Apache 2.0](#)  
[Find out more about Swagger](#)

Schemes

HTTP

Authorize

pet Everything about your Pets

POST /pet Add a new pet to the store

PUT /pet Update an existing pet

GET /pet/findByStatus Finds Pets by status

GET /pet/findByTags Finds Pets by tags

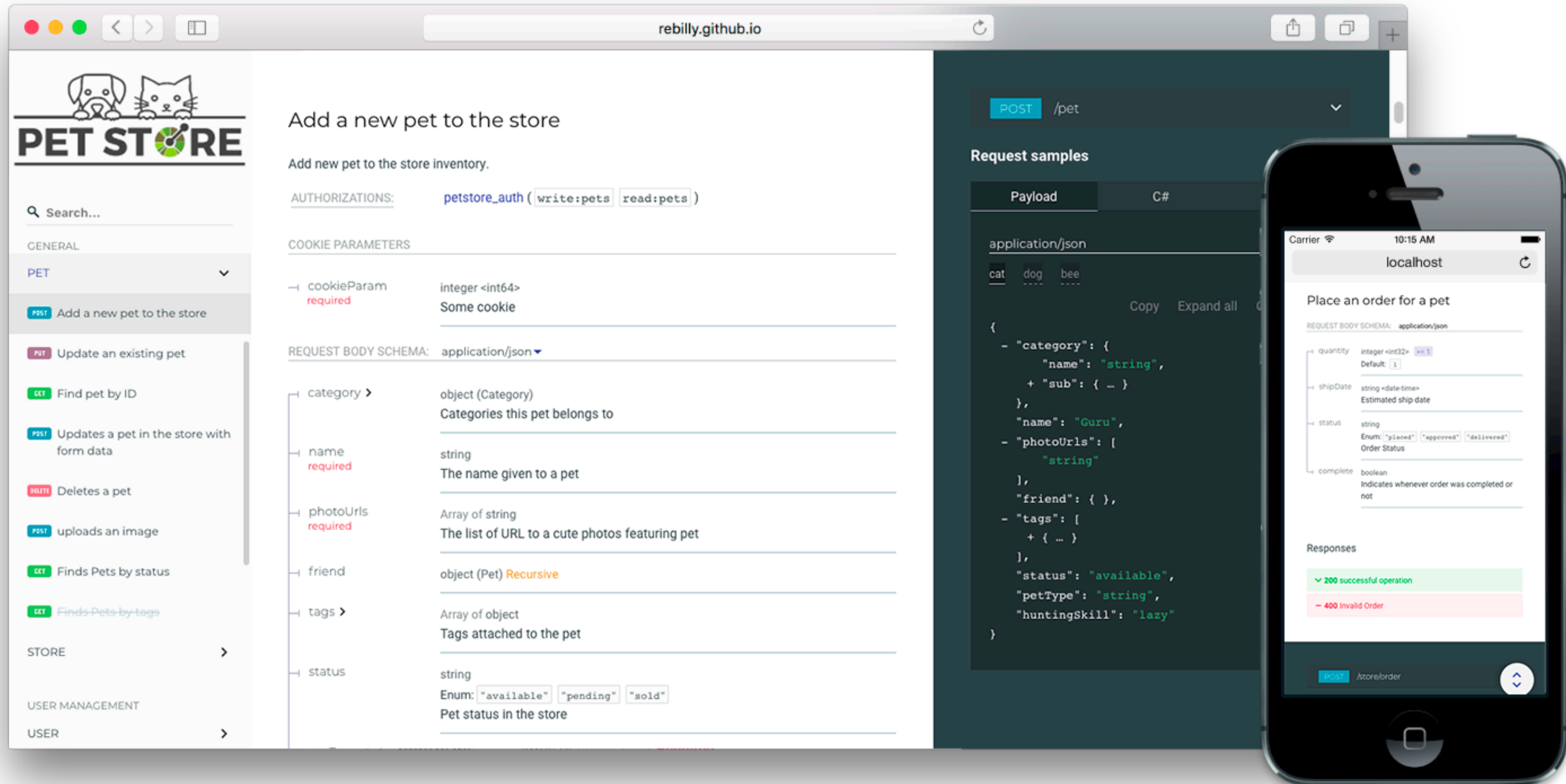
GET /pet/{petId} Find pet by ID

POST /pet/{petId} Updates a pet in the store with form data

DELETE /pet/{petId} Deletes a pet



# ReDoc





<CODE>

never lies,

<!-- comments -->

sometimes do.

- Ron Jeffries





# Generating Docs with RRF-YASG

```
pip install -U drf-yasg
```

## 1. Quickstart

In `settings.py`:

```
INSTALLED_APPS = [  
    ...  
    'django.contrib.staticfiles', # required for serving swagger ui's css/js files  
    'drf_yasg',  
    ...  
]
```

In `urls.py` :

```
...
from rest_framework import permissions
from drf_yasg.views import get_schema_view
from drf_yasg import openapi

...

schema_view = get_schema_view(
    openapi.Info(
        title="Snippets API",
        default_version='v1',
        description="Test description",
        terms_of_service="https://www.google.com/policies/terms/",
        contact=openapi.Contact(email="contact@snippets.local"),
        license=openapi.License(name="BSD License"),
    ),
    public=True,
    permission_classes=(permissions.AllowAny,),
)

urlpatterns = [

    url(r'^swagger/$', schema_view.with_ui('swagger', cache_timeout=0), name='schema-swagger-ui')
    url(r'^redoc/$', schema_view.with_ui('redoc', cache_timeout=0), name='schema-redoc'),
    ...
]
```