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I'm a passionate software developer and researcher from Brazil, currently living in Finland. I write about Python, Django and Web Development on a weekly basis. [Read more](#).



TUTORIAL

How to Save Extra Data to a Django REST Framework Serializer

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Django REST Framework

Save Extra Data to Serializers

(Picture: <https://www.pexels.com/photo/grayscale-photo-of-computer-laptop-near-white-notebook-and-ceramic-mug-on-table-169573/>)

In this tutorial you are going to learn how to pass extra data to your serializer, before saving it to the database.

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Introduction

When using regular Django forms, there is this common pattern where we save the form with `commit=False` and then pass some extra data to the instance before saving it to the database, like this:

```
form = InvoiceForm(request.POST)
if form.is_valid():
    invoice = form.save(commit=False)
    invoice.user = request.user
    invoice.save()
```

This is very useful because we can save the required information using only one database query and it also make it possible to handle not nullable columns that was not defined in the form.

To simulate this pattern using a Django REST Framework serializer you can do something like this:

```
serializer = InvoiceSerializer(data=request.data)
if serializer.is_valid():
    serializer.save(user=request.user)
```

You can also pass several parameters at once:

```
serializer = InvoiceSerializer(data=request.data)
if serializer.is_valid():
    serializer.save(user=request.user, date=timezone.now(), status='sent')
```

Example Using APIView

In this example I created an app named `core`.

`models.py`

```
from django.contrib.auth.models import User
from django.db import models

class Invoice(models.Model):
    SENT = 1
    PAID = 2
    VOID = 3
```

```

STATUS_CHOICES = (
    (SENT, 'sent'),
    (PAID, 'paid'),
    (VOID, 'void'),
)

user = models.ForeignKey(User, on_delete=models.CASCADE, related_name=
number = models.CharField(max_length=30)
date = models.DateTimeField(auto_now_add=True)
status = models.PositiveSmallIntegerField(choices=STATUS_CHOICES)
amount = models.DecimalField(max_digits=10, decimal_places=2)

```

serializers.py

```

from rest_framework import serializers
from core.models import Invoice

class InvoiceSerializer(serializers.ModelSerializer):
    class Meta:
        model = Invoice
        fields = ('number', 'amount')

```

views.py

```

from rest_framework import status
from rest_framework.response import Response
from rest_framework.views import APIView
from core.models import Invoice
from core.serializers import InvoiceSerializer

class InvoiceAPIView(APIView):
    def post(self, request):
        serializer = InvoiceSerializer(data=request.data)
        serializer.is_valid(raise_exception=True)
        serializer.save(user=request.user, status=Invoice.SENT)
        return Response(status=status.HTTP_201_CREATED)

```

Example Using ViewSet

Very similar example, using the same **models.py** and **serializers.py** as in the previous example.

views.py

```
from rest_framework.viewsets import ModelViewSet
from core.models import Invoice
from core.serializers import InvoiceSerializer

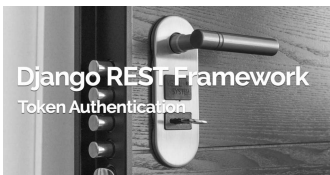
class InvoiceViewSet(ModelViewSet):
    queryset = Invoice.objects.all()
    serializer_class = InvoiceSerializer

    def perform_create(self, serializer):
        serializer.save(user=self.request.user, status=Invoice.SENT)
```

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