

Progetto\_Django > socialDex > api > utils.py

Project

Progetto\_Django ~\Desktop\Start2Impact\Blockchain\3 - Django\Progett

socialDex

api

migrations

static

templates

api

base.html

post\_detail.html

post\_edit.html

post\_list.html

\_\_init\_\_.py

admin.py

apps.py

forms.py

models.py

tests.py

urls.py

utils.py

views.py

wallet.py

socialDex

\_\_init\_\_.py

asgi.py

settings.py

urls.py

wsgi.py

db.sqlite3

manage.py

venv

External Libraries

Scratches and Consoles

views.py

admin.py

post\_detail.html

forms.py

base.html

api.css

post\_edit.html

urls.py

utils.py

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```
from web3 import Web3

def sendTransaction(message):
    w3 = Web3(Web3.HTTPProvider('https://ropsten.infura.io/v3/a8f26a319ba94adc93f3ebdd6ecc394d'))
    address = ''
    privateKey = ''
    nonce = w3.eth.getTransactionCount(address)
    gasPrice = w3.eth.gasPrice
    value = w3.toWei(0, 'ether')
    signedTx = w3.eth.account.signTransaction(dict(
        nonce=nonce,
        gasPrice=gasPrice,
        gas=100000,
        to='0x0000000000000000000000000000000000000000',
        value=value,
        data=message.encode('utf-8')
    ), privateKey)

    tx = w3.eth.sendRawTransaction(signedTx.rawTransaction)
    txId = w3.toHex(tx)
    return txId
```

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Python Program with Framework Django.

Simple blog that writes the content of

every post on Ethereum Blockchain

(Testnet Ropsten)

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```

1  from django.shortcuts import render
2  from django.http import JsonResponse
3  from .models import Post
4  from django.shortcuts import get_object_or_404, redirect
5  from .forms import PostForm
6  from django.contrib.auth.decorators import login_required
7
8
9  def postjson(request):
10     response = []
11     posts = Post.objects.filter().order_by('-datetime')
12     for post in posts:
13         response.append(
14             {
15                 'datetime': post.datetime,
16                 'title': post.title,
17                 'content': post.content,
18                 'author': f"{post.user.username}",
19                 'hash': post.hash,
20                 'TxId': post.txId,
21             }
22         )
23     return JsonResponse(response, safe=False)
24
25
26 def post_list(request):
27     posts = Post.objects.filter()
28     return render(request, 'api/post_list.html', {'posts': posts})
29
30
31 def post_detail(request, pk):
32     post = get_object_or_404(Post, pk=pk)
33     return render(request, 'api/post_detail.html', {'post': post})
34
35
36 def post_new(request):
37     if request.method == "POST":
38         form = PostForm(request.POST)
39         if form.is_valid():
40             post = form.save(commit=False)
41             post.user = request.user
42             post.writeOnChain()

```

```
36 def post_new(request):
37     if request.method == "POST":
38         form = PostForm(request.POST)
39         if form.is_valid():
40             post = form.save(commit=False)
41             post.user = request.user
42             post.writeOnChain()
43             post.save()
44             return redirect('post_detail', pk=post.pk)
45     else:
46         form = PostForm()
47     return render(request, 'api/post_edit.html', {'form': form})
48
49
50 def post_edit(request, pk):
51     post = get_object_or_404(Post, pk=pk)
52     if request.method == "POST":
53         form = PostForm(request.POST, instance=post)
54         if form.is_valid():
55             post = form.save(commit=False)
56             post.user = request.user
57             post.save()
58             return redirect('post_detail', pk=post.pk)
59     else:
60         form = PostForm(instance=post)
61     return render(request, 'api/post_edit.html', {'form': form})
62
```

## New post

Title:

Post

Content:

This Post will be written on Ethereum Testnet Ropsten

Save

EXAMPLE PART 1

*Filippo's Exercise*

Hello filipposchieratti 

Created: Feb. 17, 2021, 12:46 p.m.

Author: filipposchieratti

Content: This Post will be written on Ethereum Testnet Ropsten

Hash: 0402d77b8dab420480acec8bbd26b5ee6ad48767ea1699ec0587591e15f9684d

txId: 0xb584395967c39ab0e7a1230decc5bc5d5da996ffe1a29ec895903ab1f25ce57

**EXAMPLE PART 2**

## Transaction Details

Overview

State



[ This is a Ropsten **Testnet** transaction only ]

Transaction Hash: 0xb584395967c39ab0e7a1230decc5bc5d5da996ffe1a29ec895903ab1f25ce57 

Status: Success

**PROOF THAT THE POST IS WRITTEN ON  
BLOCKCHAIN**

Block: 9680676 5 Block Confirmations

Timestamp: 1 min ago (Feb-17-2021 12:46:28 PM +UTC)

From: [Redacted Address] 

To: 0x0000000000000000000000000000000000000000 

Value: 0 Ether (\$0.00)

Transaction Fee: 0.000044048 Ether (\$0.000000)

Gas Price: 0.000000002 Ether (2 Gwei)

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