

ACCEPTING AND SPENDING BITCOINS IN DJANGO

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PythonBrazil 2013

FORWARD



**SAID THE GRANDMA IN THE
SNOW**



WHY BITCOIN?

Bitcoin is now mature

Bitcoin is money with API

No paperwork

Free from chargeback fraud

Very low fees

DJANGO-BITCOIN

github.com/kangasbro/django-bitcoin

github.com/miohtama/django-bitcoin-example

PREREQUISITEMENTS

bitcoind

Memcached

Djangoleiro / Djangoleira

CREATING A WALLET



PYTHON MANAGE.PY SHELL_PLUS

```
In [1]: master_wallet, created = Wallet.objects.get_or_create(label="master_wallet")  
In [2]: recv_address = master_wallet.receiving_address(fresh_addr=False)  
In [3]: print recv_address  
19Ms9LtcqAJ1u436e9kjnyzkkLy18EQuBY
```


BUY SOME TEST BITCOINS

Buy bitcoins online with Euro (EUR)

LocalBitcoins.com user *opensourcehacker* wishes to sell bitcoins to you.

Price:	102.84 EUR / BTC
Payment method:	Bank transfer Finland
User:	 opensourcehacker (feedback score 100 %, see feedback)
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Location:	Suomi, Finland
Payment window:	90 minutes 

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SEND BITCOINS TO YOUR APP

 **LocalBitcoins.com** [Buy bitcoins](#) [Sell bitcoins](#) [Post a trade](#)

[Dashboard](#) [Public profile](#) [Trusted](#) **Wallet: 1.53585 BTC**

Send bitcoins

This is your LocalBitcoins.com bitcoin wallet.

Spendable balance: **1.53585** BTC

Receiving bitcoin address:

19Ms9LtcqAJ1u436e9kjnyzkkLy18EQuBY

Amount in bitcoins:

0.1

Authentication Code:

POLL BITCOIND

```
[venv][masterX] [moo@Kohr-Ah.local][18:32]
[~/code/django-bitcoin-example/example]% python manage.py CheckTransactions
starting overall 1.4066696167e-05 2013-10-04 10:33:20.193507
starting round 5.41210174561e-05
done listtransactions checking, starting checking least_received>least_received_confirmed 1.3086
3499641
done, sleeping... 1.31001615524
starting round 2.3111000061
done listtransactions checking, starting checking least_received>least_received_confirmed 3.5864
5701408
done, sleeping... 3.58774900436
starting round 4.58886218071
done listtransactions checking, starting checking least_received>least_received_confirmed 5.8783
1497192
done, sleeping... 5.87961216100
```


CHECK BALANCE


```
In [1]: master_wallet = Wallet.objects.get(label="master_wallet")  
In [2]: print master_wallet.total_balance()  
0.100000000
```

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Ai Se Eu Te Pego by Michel Teló

0.05 BTC

- 1Bk1Gwo6KVu2a85YkqHAPtdxmS8xHejDUB

SPEND BITCOINS

```
In [1]: from decimal import Decimal
```

```
In [2]: master_wallet = Wallet.objects.get(label="master_wallet")
```

```
In [3]: master_wallet.send_to_address("1Bk1Gwo6KVu2a85YkqHAPtdxmS8xHejDUB", Decimal("0.0015"), "Bought Michel Telo MP3")
```

```
No handlers could be found for logger "distributedlock.memcachedlock"
```

```
LOCK: locking with key process_outgoing_transactions
```

```
LOCK: releasing lock process_outgoing_transactions
```

```
Out[3]: (<WalletTransaction: Outgoing bitcoin transaction 0.00150000>, None)
```

```
In [4]: _
```

CHECK TRANSACTION STATUS

Transaction View information about a bitcoin transaction

6155d0dd8c83d380344f461ebd87a06cd56b850e8387080457b3e0b32793729a

17tXzFToa18PoXg6HBsthrhDXkErwu8PMA (1 BTC - Output)



1Bk1Gwo6KVu2a85YkqHAPtdxmS8xHejDUB

- (Unspent)

0.0015 BTC

1DBjUCPs39ehoCGt8j9S9A22BnveKaxk5D -


(Unspent)

0.9984 BTC

Unconfirmed Transaction!

0.9999 BTC

Summary

Size	227 (bytes)
Received Time	2013-10-04 16:54:31
Estimated Confirmation Time	3 minutes (queue position 291)
Relayed by IP 	99.52.176.162 (whois)

Visualize

[View Tree Chart](#)

Inputs and Outputs

Total Input	1 BTC
Total Output	0.9999 BTC
Fees	0.0001 BTC
Estimated BTC Transacted	0.0015 BTC

Scripts

[Hide scripts & coinbase](#)

BLOCKCHAIN.INFO

WE ARE HIRING

Hack open source projects

Python

UNIX

mikko@localbitcoins.com

github.com/miohtama/django-bitcoin-example