

# Client/Server web application communicating over a RESTfull API

## TO RUN

1. In exchange directory run:  
source exchange/bin/activate
2. In exchange directory run:  
sh install.sh  
(this file include packages, migrations, default data)
3. In exchange/exchange\_currency  
python manage.py runserver  
Access url administration panel: <http://127.0.0.1:8000/admin/>
4. In other terminal runserver frontend vue.
  - In other terminal: ../frontend
    - (Maybe it is necessary run "vue init webpack frontend" to load folder "/node\_modules")
    - npm run dev
  - Access url web: <http://localhost:8080/>

## URL API

### List the trades

You can see the list the trades in json format

Url: [http://127.0.0.1:8000/api/v1/currency\\_list/](http://127.0.0.1:8000/api/v1/currency_list/)

```
{"results": [{"identifier": "TRBE761DF", "sell_currency_code": "USD", "sell_amount": "12.00", "buy_currency_code": "EUR", "buy_amount": "34.00", "rate": "1234.0000", "date_booked": "2019-08-28"}, {"identifier": "TRE2C57B6", "sell_currency_code": "USD", "sell_amount": "343444.00", "buy_currency_code": "EUR", "buy_amount": "34344.00", "rate": "12222.0000", "date_booked": "2019-08-29"}, {"identifier": "TR412C8FB", "sell_currency_code": "USD", "sell_amount": "500.00", "buy_currency_code": "USD", "buy_amount": "600.00", "rate": "45455.0000", "date_booked": "2019-08-29"}, {"identifier": "TR822104B", "sell_currency_code": "USD", "sell_amount": "500.00", "buy_currency_code": "USD", "buy_amount": "600.00", "rate": "45455.0000", "date_booked": "2019-08-31"}, {"identifier": "TRD905390", "sell_currency_code": "EUR", "sell_amount": "500.00", "buy_currency_code": "USD", "buy_amount": "600.00", "rate": "456778.0000", "date_booked": "2019-09-01"}]}
```

## Create new trade

url :

[http://127.0.0.1:8000/api/v1/new\\_trade/?sell\\_currency=EUR&sell\\_amount=500&buy\\_currency=USD&buy\\_amount=600&rate=45455](http://127.0.0.1:8000/api/v1/new_trade/?sell_currency=EUR&sell_amount=500&buy_currency=USD&buy_amount=600&rate=45455)

```
{"SUCCESS": [ "Todo ok" ]}
```

## Get the latest rate

Url: [http://127.0.0.1:8000/api/v1/get\\_rate/?base=EUR&symbols=USD](http://127.0.0.1:8000/api/v1/get_rate/?base=EUR&symbols=USD)

```
{"success": true, "error": "", "rates": 1.096588}
```

## Administration panel

### Currency list:

Url: [http://127.0.0.1:8000/admin/exchange\\_trades/currency/](http://127.0.0.1:8000/admin/exchange_trades/currency/)

Home > Exchange\_Trades > Currencys

Select currency to change

ADD CURRENCY +

Q

Search

Action: 

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Go

 0 of 3 selected

<input type="checkbox"/>	CODE	NAME
<input type="checkbox"/>	GBP	<div>Libra</div>
<input type="checkbox"/>	USD	<div>Dollar</div>
<input type="checkbox"/>	EUR	<div>Euro</div>

3 currencys

Save

FILTER

By code

All

EUR

GBP

USD

By name

All

Dollar

Euro

Libra

### List booked trades:

Url: [http://127.0.0.1:8000/admin/exchange\\_trades/exchangetrades/](http://127.0.0.1:8000/admin/exchange_trades/exchangetrades/)

Home > Exchange\_Trades > Exchange tradess

Select exchange trades to change

Action:   0 of 5 selected

<input type="checkbox"/>	SELL CURRENCY	SELL AMOUNT	BUY CURRENCY	BUY AMOUNT	RATE	DATE BOOKED
<input type="checkbox"/>	EUR	500.00	USD	600.00	456778.0000	Sept. 1, 2019
<input type="checkbox"/>	USD	500.00	USD	600.00	45455.0000	Aug. 31, 2019
<input type="checkbox"/>	USD	500.00	USD	600.00	45455.0000	Aug. 29, 2019
<input type="checkbox"/>	USD	343444.00	EUR	34344.00	12222.0000	Aug. 29, 2019
<input type="checkbox"/>	USD	12.00	EUR	34.00	1234.0000	Aug. 28, 2019

5 exchange tradess

ADD EXCHANGE TRADES +

FILTER

By sell currency

All
EUR
USD
GBP

By sell amount

All
12.00
500.00
343444.00

By buy currency

All
EUR
USD
---

## Application web

### List the trades

List the trades existing in the database sorted by booking date

url: <http://localhost:8080/>

New Trade

### Booked Trades

ID	Sell CCY	Sell Amount	Buy CCY	Buy Amount	Rate	Date Booked
TRDFC17F6	EUR	10.00	USD	10.97	1.0968	2019-09-02
TR1A70694	EUR	100.00	USD	109.69	1.0968	2019-09-02
TR94F09EC	EUR	100.00	USD	109.71	1.0970	2019-09-02
TRD905390	EUR	500.00	USD	600.00	456778.0000	2019-09-01

### New Trade

Form to create new trade, first you select “sell currency” and “buy currency”, the rate will be calculated automatic (response api fixer.io)

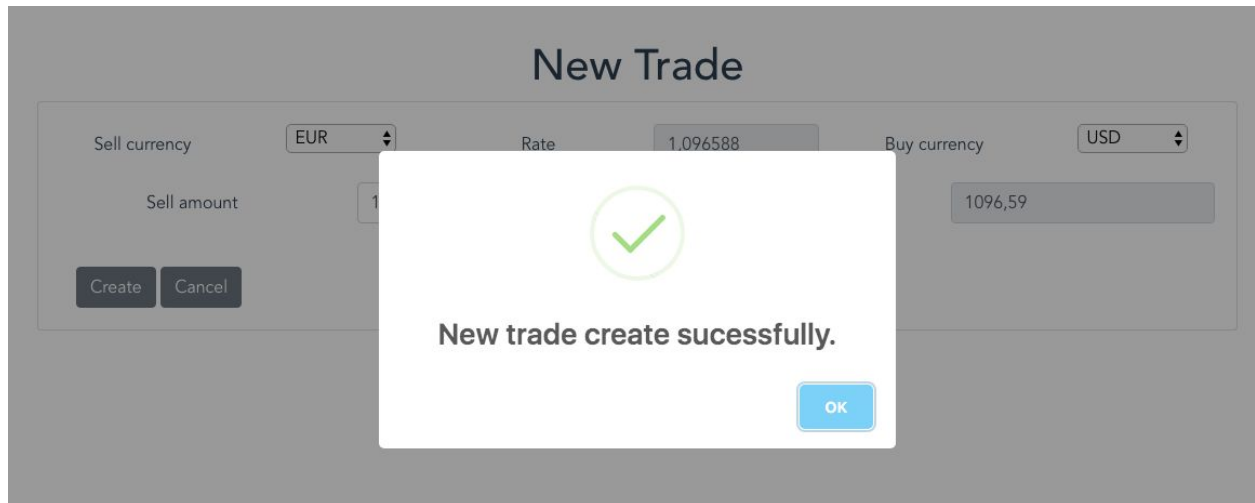
Then you put “sell amount” and “buy amount” also will be calculated.

Note: Correct example: sell currency: EUR, buy currency: USD

Url: <http://localhost:8080/new>

### New Trade

Sell currency	EUR	Rate	1,096588	Buy currency	USD
Sell amount	1000	Buy amount	1096,59		
<div>Create</div> <div>Cancel</div>					



If you click Cancel button you will be redirected to list trades.

## ABOUT CODE

exchange\_trades => Application

- api\_rest => Folder with Api rest version, in this case v1 folder has the method put and get to new trade, exchange and list booked trades.
- migrations => Migrations app
- fixer.py => Manager to connect Fixer.io (exchange rate data sources)
- models.py => Application model (
- frontend =>