## Aloi Lorenzo



A web & console cryptocurrencies APIexchange

Bixchange is a crtyptocurrency exchange, meaning a place where users can buy and sell cryptos.

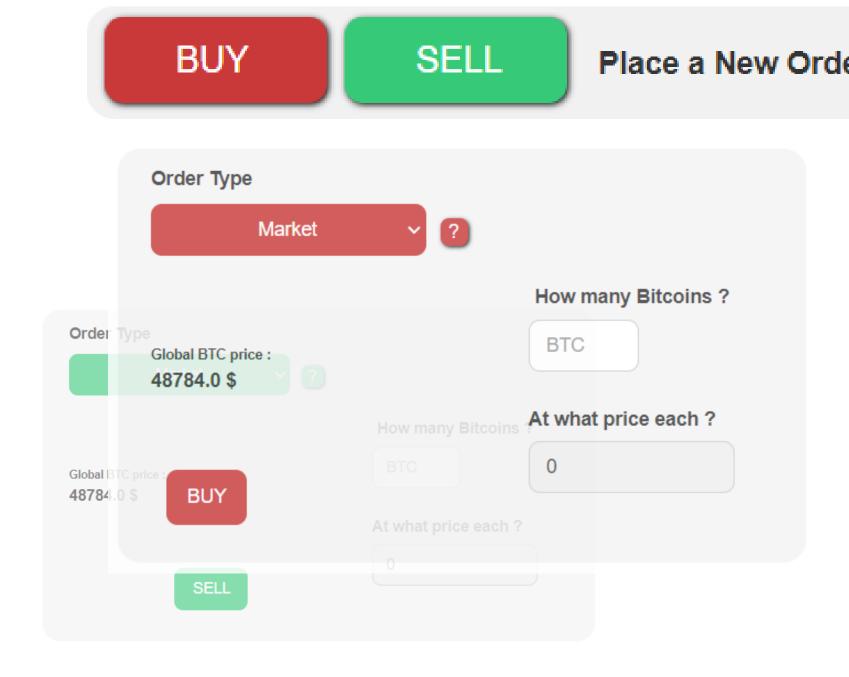


It features both a Web application and a Console application, operating on a MongoDB database.

WELCOME TO THE BIXCHANGE CONSOLE APP ! Press L to [L]ogin Press Q to [Q]uit



# The Exchange.



Place a New Order Do you feel like buying or selling some Bitcoins today?

As on every respectable exchange; also on Bixchange users can place Buy and Sell orders.

Users can then choose how the order will inteact with the marketplace by selecting the Order Type.

There are 3 order types:

- Market Order
- Limit Fast
- Limit Full

#### **Market Orders**

Users set the amount of BTC they'd like to buy or sell.

The exchange will then immediately search the market for the best rates

A Market orderd will be either fulfilled entirely and immediately, or it will be canceled.

### **Limit FAST Orders**

Users set the amount of BTC and the Dollar price of each.

The market will look for the optimal deals for the order.

Trying to fulfill it enirely, if that is impossible: the order will be fulfilled as much as possible the un-fulfilled amount will remain Open on the market, waiting for a optimal match.

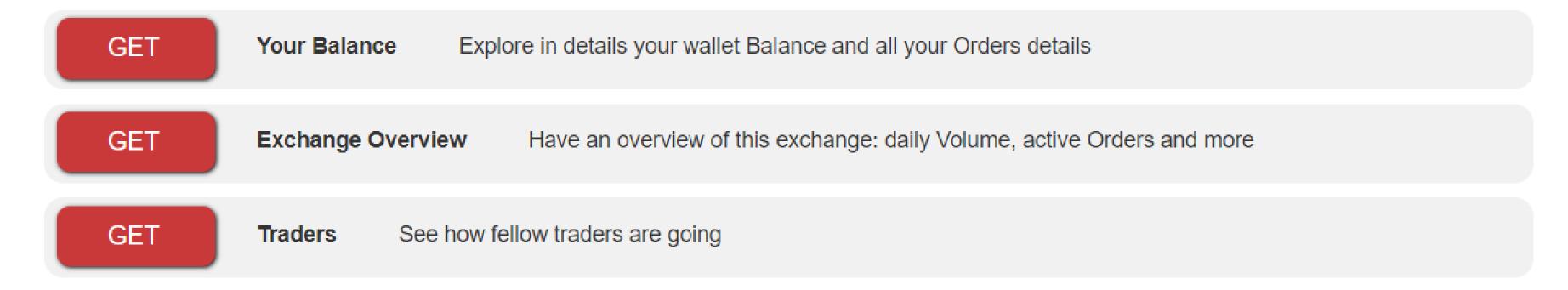
## **Limit FULL Orders**

Users set the amount of BTC and the \$ price of each.

The market will search for a way to fulfill it enirely, if that is impossible at the moment, the whole order will be published on the market.

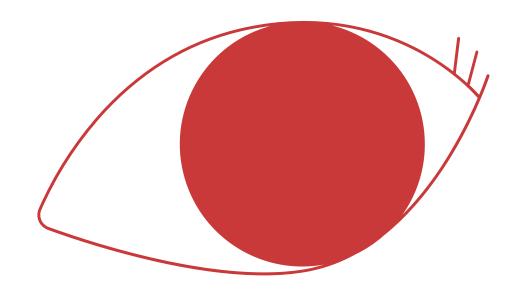
A Limit FULL order will never be splitted, it will be either entirely fulfilled or left Open on the market, waiting for a optimal match.

# The API.



The API allows users to send requests to Bixchange and obtain in return informations of the platform.

Those datails can regard the user, the exchange or the other traders.



Every API request, displays a JSON styled answer.
So you can have a look at the details.

```
"ID": 22,
5
        "username": "YouAreAwesome",
6
        "Own referral code": "JQCft",
        "USD available": 500.0,
8
        "BTC available": 13.0,
9
        "Locked USD": 0.0,
10
        "Locked BTC": 0.0,
11
        "Profit": 1217.0,
12
        "Orders": {
13 v
          "Orders Placed": 1,
14
          "Open Orders": 0,
15
          "Closed Orders": 1,
16
17
          "Failed Orders": 0,
          "Canceled Orders": 0,
18
19 ▼
          "Full Orders Details": [
20 ▼
              "840": {
21 ▼
                 "Date": "2021-12-21T10:14:00.477Z",
22
                 "Order Type": "Sell_Market",
23
                "Opening Amount": 2.0,
24
                "Amount Left": 0.0,
25
                "Asked USD for BTC unit": "Market Price",
26
                "USD order value": 16.0,
27
                 "Order Status": "Closed",
28
                 "History": {
29 🔻
                   "12/21/2021 11:14:00": [
30 ▼
```

# The Console.

Some users may prefer to use the Console application instead of the Web one.



```
C:\Windows\System32\cmd.exe - python core.py
Connecting to the servr...
 onnected to the server !
     http://127.0.0.1:8000/console
   COME TO THE BIXCHANGE CONSOLE APP !
Press L to [L]ogin
```

The Console App presents a textbased interface and all the feaures of the platform, plus something more

C:\Windows\System32\cmd.exe - python core.py 840 Order ID : 840 Made the: 2021-12-21T10:14:00.477Z ype: Sell Market BTC opening amount: 2.0 BTC amount left: 0.0 Asked USD for BTC unit Market Price\$ JSD order Value: 16.0\$ TATUS : Closed HISTORY: '12/21/2021 11:14:00': ['OPENED', 'New Sell\_Market Order by: YouAreAwesome of 2.0 bt 'Market order, nothing is locked', '----', 'TRANSACTION : New Transaction from:YouAreAwesome 'Order with id: 840 of type: Sell\_Market is now Cl '--END--', 'Order completed! sold 2.0btc for 16.0\$ of profit! Orders Overview Orders Placed : 1 pen Orders : 0 Closed Orders : 1 ailed Orders : 0 Canceled Orders : 0 EXPLORE ORDERS Press A to display [A]ll Press S to filter by [S]tatus Press T to filter by [T]ype ress M to [M]anage single orders press X to go back

#### Bixchange was developed with:

- <u>Python 3.9</u>
- <u>Django Web Framework 3.2.9</u>
- Mongo DB Database
- <u>Djongo MDB Mapper</u>
- And a series of complementary libraries, a full list can be found <u>here</u>
- Web app UI:
  - Webflow
- This Presentation
  - Canva

**GitHub** Repository

BixChange is LIVE at <a href="https://15ae-15-160-69-245.ngrok.io/">https://15ae-15-160-69-245.ngrok.io/</a>

#### **Original commitment:**

• Start2Impact, blockchain-dev program - MongoDB Project