Aloi Lorenzo

< **BixChange** >

A web **&** console cryptocurrencies APIexchange

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

GET Your Balance Explore in details your wallet Balance and all...

GET Exchange Overview Have an overview of this exchange...

GET Traders See how fellow traders are going

BUY SELL Place a New Order Do you feel like buying or selling some Bitcoins today?
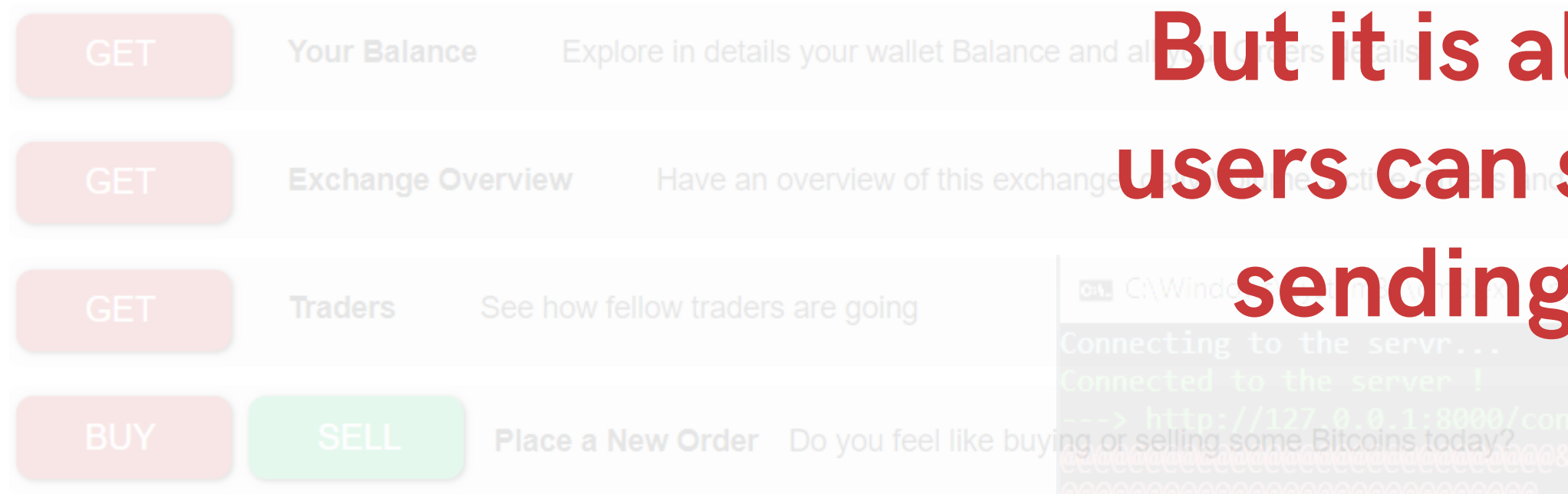
But it is also an API exchange, meaning users can send and retreive information sending instructions to its endpoints.

Connecting to the servr...
Connected to the server !
--> http://127.0.0.1:8000/console

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
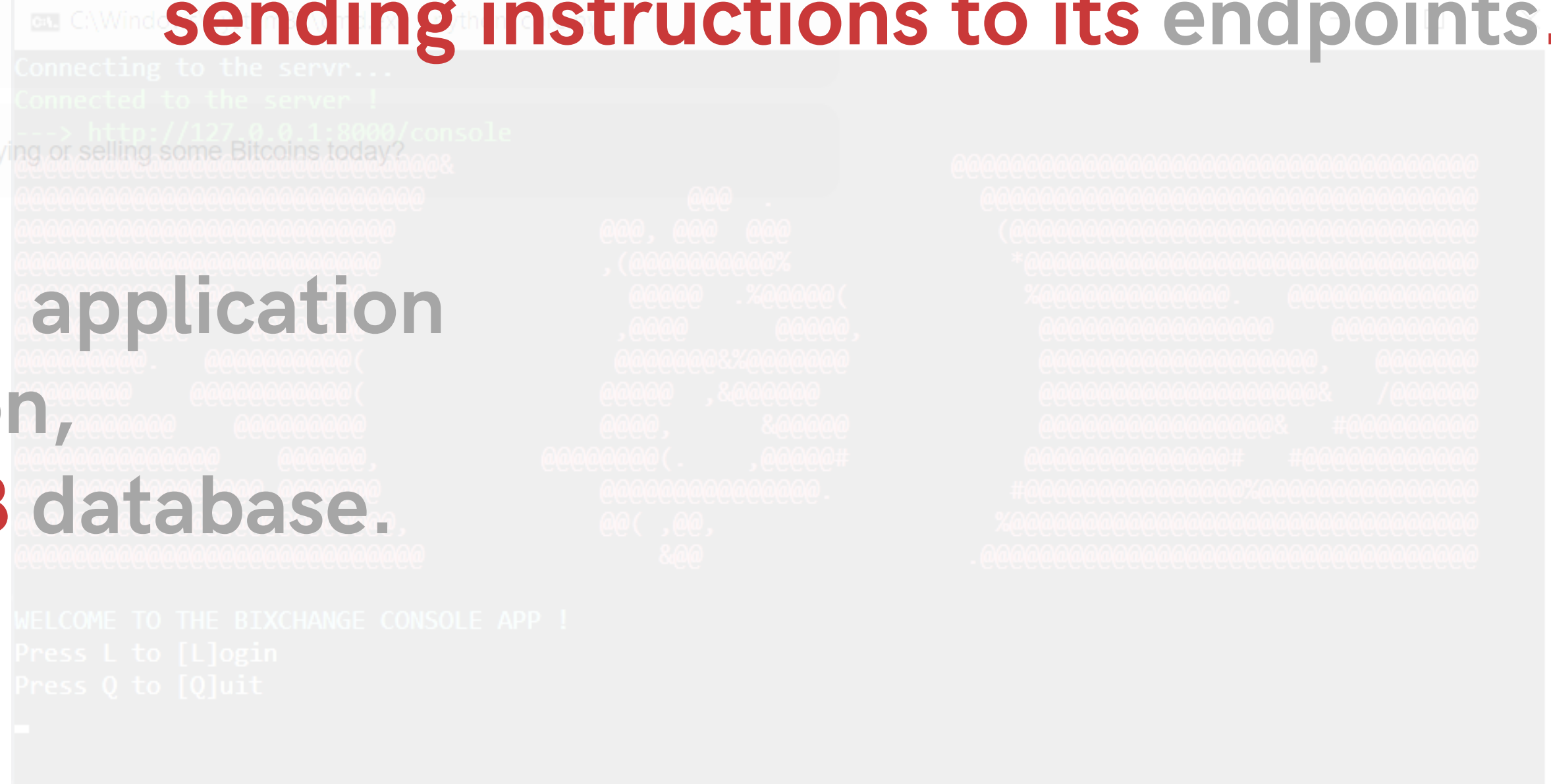
Allowing **different** type of users to interact within the **same** marketplace.
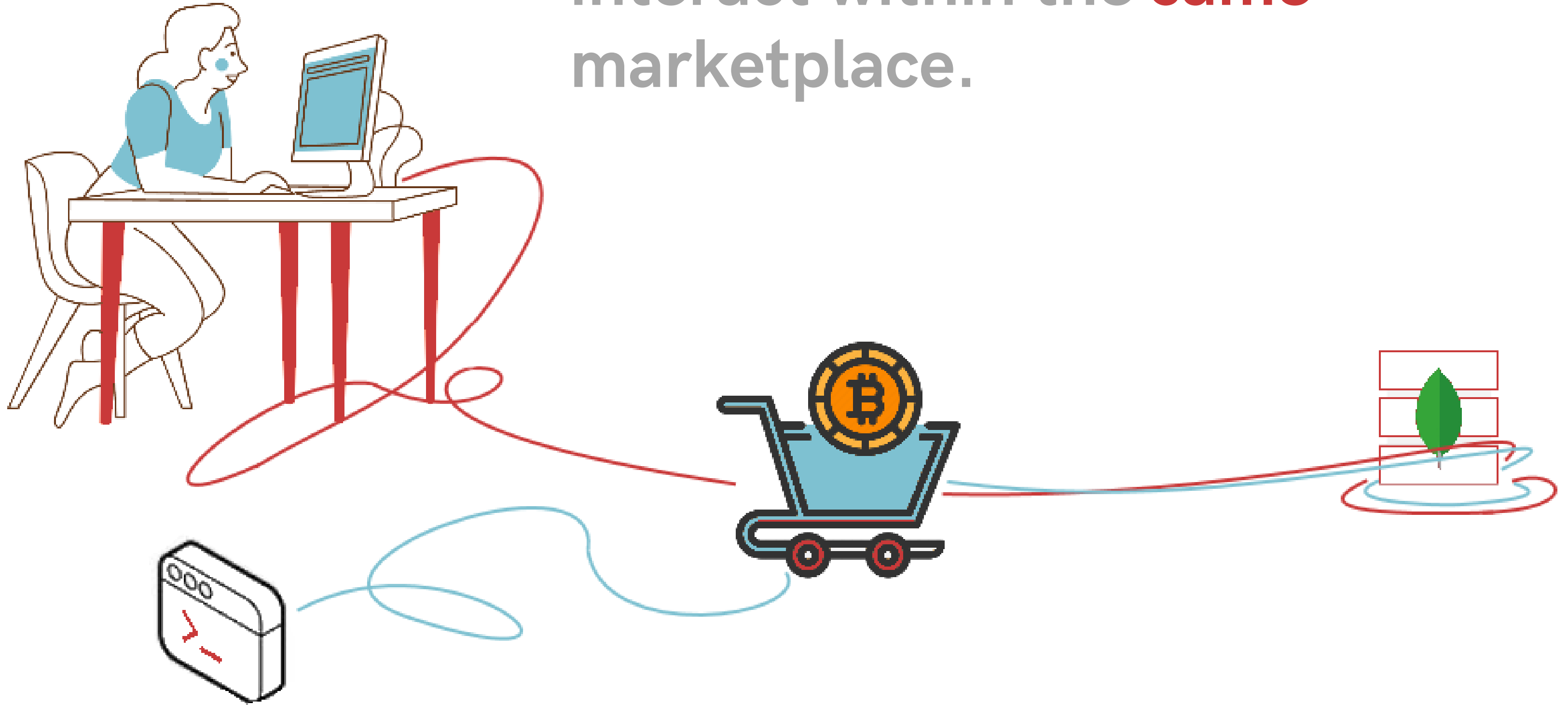
The **Exchange**.

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

Order Type

Market

How many Bitcoins ?

BTC

At what price each ?

0

Order Type

Global BTC price :
48784.0 $

How many Bitcoins ?

BTC

BUY

Global BTC price :
48784.0 $

At what price each ?

0

SELL

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.
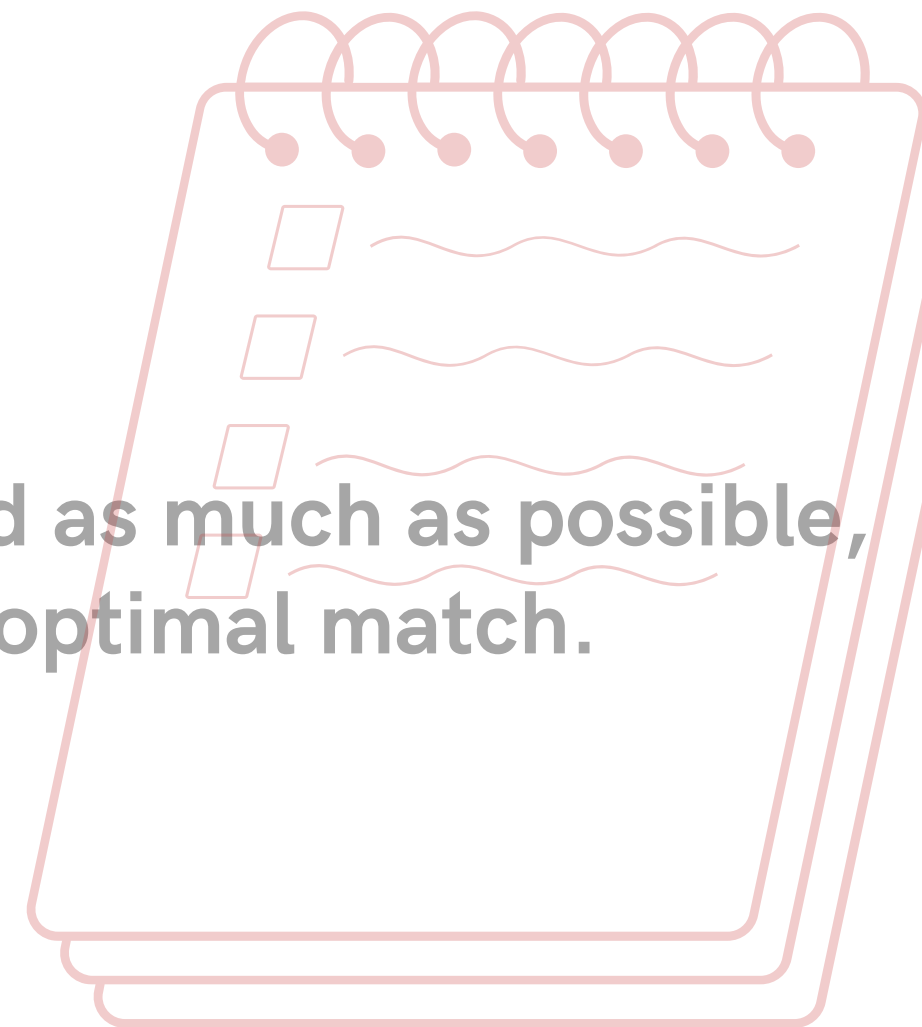
The **API.**

GET	**Your Balance**	Explore in details your wallet Balance and all your Orders details

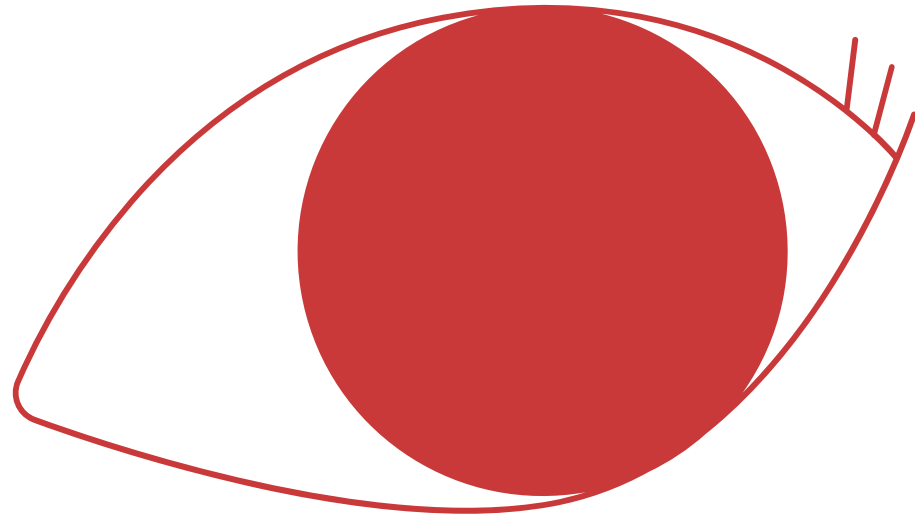|		
GET	**Exchange Overview**	Have an overview of this exchange: daily Volume, active Orders and more

GET	**Traders**	See how fellow traders are going

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.

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

The **Console**.

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

This can favor the developement of a **programmable** usage of the platform.

The Console App presents a **text-based** 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
Type: Sell_Market
BTC opening amount: 2.0
BTC amount left: 0.0
Asked USD for BTC unit Market Price$
USD order Value: 16.0$
STATUS : 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
Open Orders : 0
Closed Orders : 1
Failed 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
press M to [M]anage single orders
press X to go back
```

Bixchange was developed with:

- Python 3.9
- Django Web Framework 3.2.9
- Mongo DB Database
- Djongo -MDB Mapper
- And a series of complementary libraries, a full list can be found **here**

- **Web app UI :**
  - Webflow

- **This Presentation**
  - Canva

GitHub Repository

BixChange is LIVE at https://bixchangeapi.loca.lt/

Original commitment :
- **Start2Impact** , blockchain-dev program - MongoDB Project