# Bitcoin Price Notification

#### **Aim**

As we all know, the Bitcoin price is a fickle thing. You never really know where it's going to be at the end of the day. So, instead of constantly checking various sites for the latest updates, let's make a **Python app that runs as a command-line tool** to do the work for you.

Although many alternatives exist such as Firebase/Custom Web Sockets, we recommend using the popular automation website IFTTT. IFTTT ("if this, then that") is a web service that bridges the gap between different apps and devices.

You will create two IFTTT applets:

- 1. One for emergency notification when Bitcoin price falls under a certain threshold
- 2. Another for regular Telegram updates on the Bitcoin price.

The output on your phone should be as shown below.

#### Requirements

Clarity of how to make requests in python(GET, POST) using the requests library, WebHooks(IFTTT) and python package manager(pip).

#### **Deliverables**

- A 500-word report describing your approach/code to be uploaded on GitHub in the README.MD file of your repo that contains a modular code.
- 2. A working demo on your mobile/PC device showcasing how the tool works and sends notifications on your mobile giving a bitcoin price provided that it crosses a certain value. (Like send me a notification every time bitcoin crosses a price of say \$10k/coin).

bitcoin-price-notifier -e 10000 -t 60 [-s destination] [-c currency] [-t coin\_type]

## **Recommended Approach**

Play around with the IFTTT notification service using your code and your mobile phone. Then, write code for periodically retrieving the bitcoin price. Create the IFTTT Applet for the whole service. Then wrap it up together as a service and deploy it on a server.

### Sample Code

https://realpython.com/python-bitcoin-ifttt/

!Disclaimer: Blatant copies of this will not be checked.

# **BITCOIN PRICE NOTIFICATION**

#### **BITCOIN PROJECT:**



About:-

As we all know, Crypto Currency price is a fickle thing. You never really know where it's going to be at the end of the day. So, instead of constantly checking various sites for the latest updates, this python program push crypto currency price notifications at certain time interval and also notify when price reach to a certain value as threshold value provided by user.

### **Advantage Of Bitcoin**

By using a cryptocurrency, users are able to exchange value digitally without third party oversight

#### **Installation Guide:**

step by step series of examples and explanations about how to get your development envrunning.

## Step 1

Either Download the Repo, Which you will find at the top right of Repo link or clone it in your Local Machine.

git clone https://github.com/attainu/project-yodraj-dendukuri-au8

## Step 2

• Go into the Folder by using command line.

#### Step 3

Make Sure that your Machine has Python 3.8+ Run the following Command \$ python3 Bitcoin\_Notification.py --help

### Step 4

Then, you will see the following options
Optional arguments:

```
-e ALERT_AMOUNT, --alert_amount ALERT_AMOUNT
        The price of 1 bitcoin when an emergency
        alert will be sent. Default is 10000 USD
-t TIME_INTERVAL, --time_interval TIME_INTERVAL
        The Frequency at which the Bitcoin value
        is going to be Fetched from Server
-d DESTINATION_APP, --destination_app DESTINATION_APP
        The Messaging Service Destiation
        1. TWITTER
        2. TELEGRAM
-c CURRENCY, --currency CURRENCY
        Bitcoin value in
        1.INR(Indian Rupees)
        2.USD(US Dollars)
-ct COINTYPE, --cointype COINTYPE
        Type of crypto currency is bitcoin
```

-h, --help show this help message exit

### Step 5

- If user didn't give above optional argument then python will consider below default parameter
  - alert\_amount = 10000
  - o time\_interval = 60
  - o coinType = 'Bitcoin'

- currency = user's choice out of the 2 option 1.INR (Indian Rupees) 2.USD (US Dollars)
- For destination\_app update will send to any app of the user's choice out of the 2 option. 1. TWITTER 2. TELEGRAM
- After sends a notification to a Particular app, if the price does not cross the threshold limit it sends Android SMS (particular phone no.). Otherwise a normal price update will send to the user's choice out of the 2 option.

#### **Target Applications:**

- Telegram
- Twitter
- Android SMS

# **Python Packages & Libraries Used**

- Request
- time
- Argparser
- Tqdm (For Progress bar)

## **Technologies Used:**

- Python 3.8
- HTTPS
- Webhooks
- Messaging Platforms Available:
  - Telegram
  - IFTTT App
  - Twitter
  - o Android SMS

## **Future Scope:**

Expand the Messaging Platforms

• Include other Cryptocurrency for this Project.

# **API Reference:**

- Cinedesk Docs
- IFTTT API reference