**Crypto Aggregator**

**Concept –** The primary purpose of this ‘Tool’ is to streamline and compare top crypto currency prices across multiple crypto exchanges across the world and present the users with some investment choices on which exchange to choose for a particular crypto currency.

**Objective –** To help the users make an educated decision based on the prices offered by various exchanges.

**Use Cases –**

* ***Crypto currency aggregation*** – One stop destination for users to get information about crypto currencies and their prices as offered across various exchanges
* ***Exchange Recommendation*** –
  + People usually want to buy any product/investment offered at its lowest price. Now users can get that information at a glance and go with the exchange offering the cheapest options
  + Taking into account various transaction fees/charges, suggest the most optimal exchange.
* ***Market Trends*** - See useful visualizations to help understand the trends in the markets

**Data sources –**

We will be pulling data from different crypto currency exchanges to monitor coin prices, volumes, market cap, demand/supply across these websites.

**Data available through –**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Source #** | **Source name** | **CSV** | **API** | **Web scrape** |
| 1 | Coinbase | NO | YES (https://developers.coinbase.com/api/v2#get-currencies) | YES (https://www.coinbase.com/price) |
| 2 | Binance | NO | YES (https://developers.binance.com/docs/binance-api/spot-detail/rest-api#current-average-price) | YES (https://www.binance.us/en/markets) |
| 3 | Kraken | NO | YES (<https://api.kraken.com/0/public/Assets>) | YES (https://www.kraken.com/prices?quote=CAD) |
| 4 | Gemini | NO | YES (https://docs.gemini.com/rest-api/#price-feed) | YES (https://www.gemini.com/prices) |

There are other sites that scrape data from these websites and provide us with csv data if required, but there is no such download csv option in any of these websites.

Metrics to scrape:

|  |  |  |
| --- | --- | --- |
| **Source #** | **Source name** | **Metrics/Key info gathered** |
| 1 | Coinbase | Coin Prices, Volumes, %change, trading activity, Ranking |
| 2 | Binance | Coin Prices, Volumes, %change, trading activity, Ranking |
| 3 | Kraken | Coin Prices, Volumes, %change, trading activity, Ranking |
| 4 | Gemini | Coin Prices, Volumes, %change, trading activity, Ranking |

**Distribution of work –**

|  |  |  |
| --- | --- | --- |
| **Line Items** | **Description** | **Person(s) Responsible** |
| 1) | Data Acquisition | Partha |
| 2) | Data cleaning | Diya |
| 3) | Exploratory Data Analysis | Aniket |
| 4) | Visualization/Analytics | Koushik |