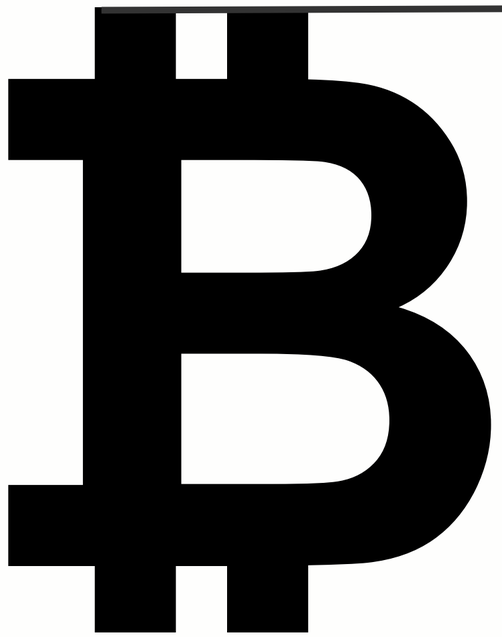
EasyCrypto

Beginner Friendly Analysis
and Predictions

TABLE OF CONTENTS



Key Concepts

Overall Context

Problem Statement

Easy Crypto Solution

Action Plan

Data

Future Improvements

End

OVERALL CONTEXT

BITCOIN

- Decentralized digital currency without a central bank or single administrator.

- Operates on a peer-to-peer network, allowing transactions to occur directly between users.

- These transactions are verified by network nodes through cryptography and recorded on a public ledger called the blockchain.

ETHERIUM

- Decentralized, open-source blockchain platform that features smart contract functionality.

- Ether (ETH) is the native cryptocurrency of the platform.

-Allows developers to build and deploy decentralized applications (dApps) on its network.

SP500 & NASDAQ

- S&P is an index that tracks the performance of 500 large-cap U.S. companies

- NASDAQ is an index of over 3,000 companies, with a strong focus on technology companies.

- Both indexes serve as key barometers for the overall U.S. stock market's health and performance.

GOLD

- Gold is a precious metal that has been used as a store of value currency for years.

- Its scarcity, durability, and historical significance contribute to its status as a hedge against economic instability.

UNDERSTANDING THE NEW FINANCIAL ORDER

The rapid emergence and growth of cryptocurrencies have transformed the global financial landscape, introducing a new paradigm of decentralized finance. Yet, for many individuals, the crypto world remains an enigma, seen as a separate and complex entity distinct from the traditional financial markets.

How can we bridge this knowledge gap, demonstrating the intricate connections between cryptocurrencies and well-known financial indicators?

Furthermore, how can we provide individuals, especially those new to the crypto space, with an intuitive and comprehensive platform that not only visualizes these connections but also equips them with tools for informed decision-making?

EASY CRYPTO SOLUTION

VISUAL OVERVIEW

- Straightforward visual comparison of major cryptocurrencies and traditional indexes.
- Easier to discern patterns, similarities, or differences in trends. This visual juxtaposition demystifies the idea that the crypto world operates in isolation and showcases its interdependence with traditional financial systems.

RETURNS AT A GLANCE

- Quickly see and compare financial performance over various periods.
- Users get a succinct overview, enabling them to make informed decisions.

NEWS SENTIMENT ANALYSIS

- Staying updated with recent news is crucial in the financial world.
- Offering a sentiment analysis provides users with a quick pulse of the market mood, helping them gauge the general sentiment around specific assets.

PREDICTIVE ANALYTICS

- User is empowered with an LSTM-based predictive model that forecasts BTC prices.
- While predictions come with their uncertainties, having a forecast gives users a starting point for their analysis and potential investment strategies.

APP FLOW

LOAD MODELS

1. Load a pre-trained LSTM model and a scaler, and implement recursive_predictions for BTC.
2. Load a pre-trained ROBERTa model for sentiment analysis and create a function (**score_sentiment**) to evaluate sentiment on a given text.

UPDATE ALL DATA

1. Fetch the latetst market informatiom
2. Fetch the latest market news

DATA TREATMENT

1. Process and clean data
2. Make all necessary calculations and structring

DISPLAY INFORMATION

1. Visualize and interact with the cleaned data.
2. Use the LSTM model to predict BTC prices

LET'S TAKE A LOOK AT THE APP

FUTURE IMPROVEMENTS

Model Enhancements

Integrate Sentiment Analysis into LSTM
Hyperparameter Tuning:
Ensemble Approaches
Sentiment analysis of the text and title
Overal

Richer Visualization

Incorporate more indicators
Interactive charts with details
Pinpoint major market turn points and events (ex. COVID)

Feedback Loop

Incorporate user feedback

IMPROVE UI & UX

Improve the app design and usability

Expand Data Sources

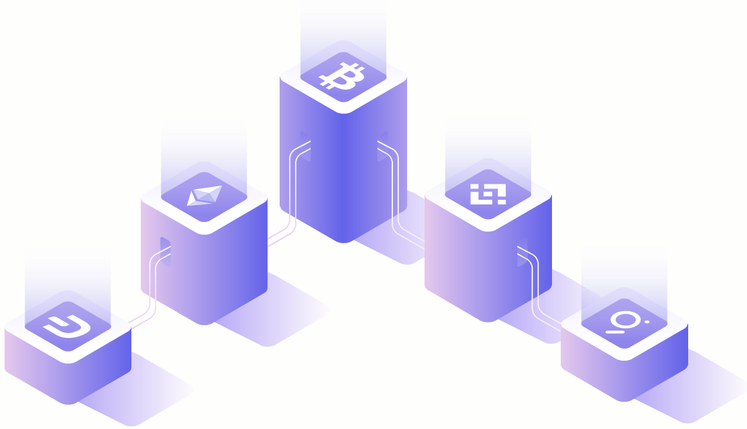
Integration of More Cryptos
Global Financial News

Educational Components

Interactive learning and additional content (ex: Investment strategies)
Step by Step on how to enter the decentralized financial world

User Personalization

User profiles allowing them to save favourites and analysis indicators preferences
Alerts and notifications

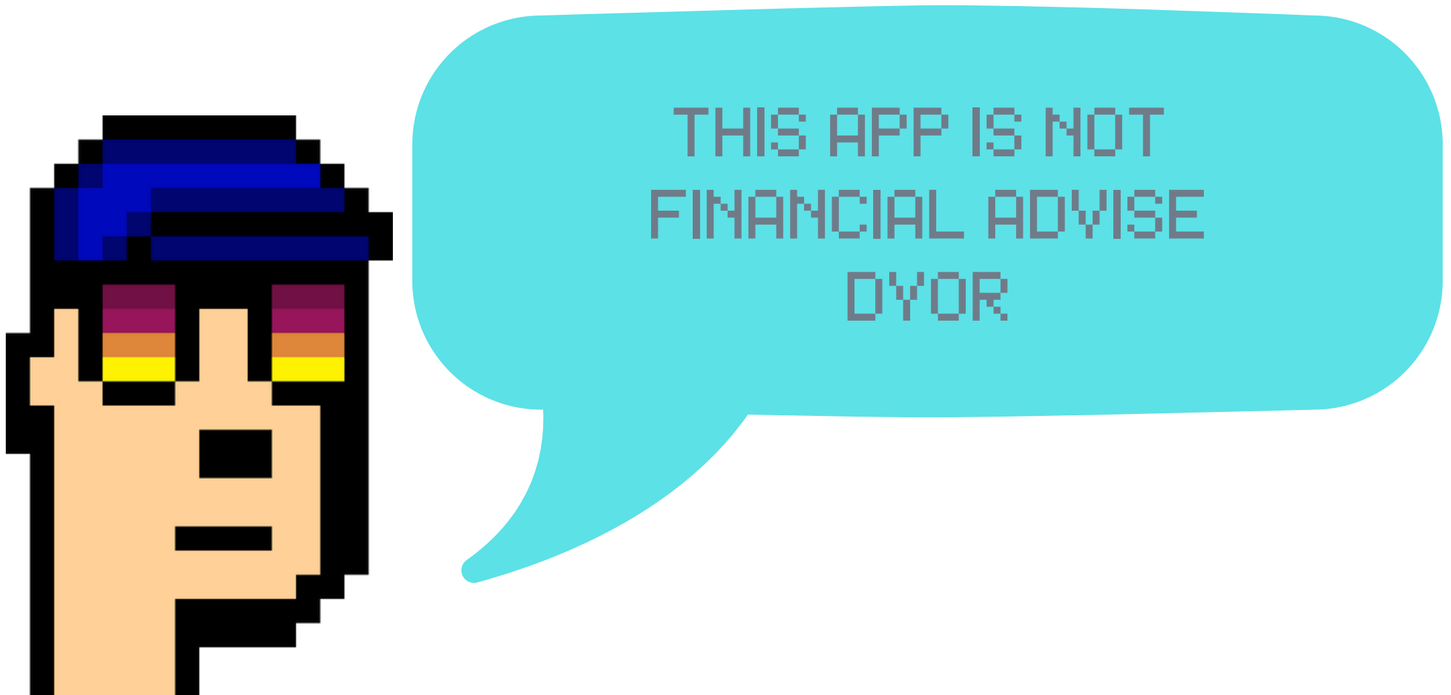


THANK YOU!

“Live as if you were to die tomorrow. Learn as if you were to live forever.”

— Mahatma Gandhi

LINKEDIN.COM/IN/NUNOCORNELIO/

NUNOCORNELIO@GMAIL.COM

DISCLAIMER